THE JOURNAL OF THE NUMISMATIC SOCIETY OF INDIA

Vol. II] *[1940*

Chief Editor

A. GHOSE, *M. A.*

Joint Editors

R. G. GYANI, *M. A.*

Curator : Archæological Section, Prince of Wales Museum, Bombay

A. S. ALTEKAR, *M. A., LL. B., D. Litt.*

Professor of Ancient Indian History and Culture, Banaras Hindu University

THE

NUMISMATIC SOCIETY OF INDIA

THE

JOURNAL

OF THE

NUMISMATIC SOCIETY OF INDIA

VOL. II.

JOINT EDITORS

R. G. GYANI, M.A.

Curator : Archæological Section, Prince of Wales Museum, Bombay.

A. S. ALTEKAR, M.A., LL.B., D.LITT.

Professor of Ancient Indian History and Culture, Benares Hindu University.

THE

NUMISMATIC SOCIETY OF INDIA

1940

First published 1940
Reprinted 1972

737.40954
Gya

7146

Published by Sh. P. L. Gupta for The Mumistmatic Society of India, Varanasi and printed by K. L. Sachdeva for Skylark Printers, 11355, Id-Gah Road, New Delhi-55.

JOURNAL OF THE NUMISMATIC SOCIETY OF INDIA

No. II

1940

CONTENTS

		Page
I.	The Relative Prices of Metals and Coins in Ancient India By A. S. Altekar	1
II.	Paila Hoard of Punch-Marked Coins By E. H. C. Walsh	15
III.	A Note on the Shamiwala (Bijnor Dist.) Hoard of Silver Coins By E. H. C. Walsh	79
IV.	Three New Specimens of a Rare Variety of Eran-Ujjayini Coins By H. D. Sankalia	81
V.	A New Hoard of Sātavāhana Coins from Tarhāḷā (Akolā Dist.) By V. V. Mirashi	83
VI.	A Hoard of Kausambi Coins from Fatehpur By Dr. Motichandra	95
VII.	A New Hoard of Yaudheya Coins from Dehra Dun District By Prayag Dayal	109
VIII.	A New Silver Coin of Huvishka, By M. B. L. Dar	113
IX.	Some Rare Panchala Coins from the Site of Ancient Ahichchhatra, Bareilly District By M. B. L. Dar	115

		PAGE
X.	Some Rare Square Copper Pieces from Ahichchhatra in Bareilly District By M. B. L. Dar	119
XI.	Ancient Coins from Mayurbhanj By P. Acharya	123
XII.	Some Rare Coins in My Cabinet By P. S. Tarapore	127
XIII.	A Rare Bahmani Rupee By C. R. Singhal	131
XIV.	The Doubtfully-Assigned Coins of Nāsir Shāh By C. R. Singhal	133
XV.	A Rare Fractional Pice of Sher Shah Suri By C. R. Singhal	135
XVI.	Note on a Silver Coin of Aurangzeb, A New Mint By Prayag Dayal	137
XVII.	Coins of Délwārā By R. G. Gyani	139
XVIII.	Reviews Ajit Ghose	143
XIX.	News and Notes	147

THE RELATIVE PRICES OF METALS AND COINS IN ANCIENT INDIA.

BY DR. A. S. ALTEKAR, BENARES HINDU UNIVERSITY.

Thanks to the efforts of the last two generations of numismatists, we now possess a fairly good knowledge of the coins of ancient and medieval India, in gold, silver and copper. The question of the relative value of these metals and their coins is however still shrouded in considerable obscurity. Some occasional observations have been made on the subject, but it still remains to be treated in a comprehensive way. The material available is however scanty ; still it is desirable to discuss it and draw such conclusions as may be warrantable.

Extensive mines of neither gold, nor silver nor copper existed in ancient India, and the country had to import considerable quantities of these metals to meet her numismatic and household needs. Some copper mines existed and wêre worked in Rajputana and Madras Presidency, but they did not supply all the quantity of the metal required by the country. We learn from the *Periplus of the Erythrean Sea* that the western ports imported considerable quantities of this metal in the first century A.D.[1] Probably the case was the same both before and after that time.

India proper contained no mines of silver. Some of them existed in Burma and Afghanistan, but the country had to rely mainly upon the imports from Western Asia for her usual requirements.

The indigenous supply of gold was from the mines in Assam, Hyderabad, Mysore and Malabar and from the river washings in the beds of the Indus, the Ganges and the Brahmaputra.[2] What was the exact quantity of this metal supplied by these sources is not known, but it appears to have been not inconsiderable. The country however had to rely to a great extent on foreign imports for its everyday needs with respect to this metal also. Tibet was one source of supply ; the 'ant-gold' referred to by the Greek writers was obtained from that country. Some gold appears to have been imported from the mines in Eastern Siberia, when the roads were sufficiently safe.[3] But Western Asia was undoubtedly the most important source of supply. The *Periplus* mentions gold and silver bullion as articles of import in most of the ports of Western India,

1 Schoff, *The Periplus of the Erythrean Sea*, p. 42.
2 Bahl: Economic Geology, Part III, chap. 4.
3 Tarn, *The Greeks in Baktria and India*, p. 107.

and Pliny moans over the heavy drain of the yellow metal, which was steadily flowing into India to the detriment of the Roman Empire.

It will be quite clear from the above observations that the prices of gold, silver and copper must have to some extent fluctuated with the exigencies of the foreign trade.

A few observations have to be made in the beginning on the metrology of the coins in gold, silver and copper in order that the subsequent discussion should become clear. The unit of the gold coinage was called *suvarṇa* ; it weighed 16 *māshas* or 80 *rattis,* i.e., about 144 grains. We have however so far discovered no ancient gold coins of this standard. The gold coins of the Kushāṇas and the early imperial Guptas conform to the Roman standard of the *aureus* and weigh about 120 grains. Early Gupta inscriptions further show that these gold coins were known, not by the indigenous name of *suvarṇa,* but by the Roman-derived name *dīnāra.* Later Gupta emperors tried to raise the weight of their gold issues gradually to that of the *suvarṇa* ; in the reign of Skandagupta we find some Gupta coins actually conforming to the standard of *suvarṇa,* i.e., 144 grains. It must however be observed that the increase in the weight of these gold coins is counterbalanced by the heavy alloy they contained, which is in some cases as high as 50%.

With the disappearance of the Gupta power, gold coinage also disappeared from northern India. In the 11th century it was restarted by the Chedi ruler *Gāṅgeyadeva* and was subsequently continued by the Chandellas, the Gahaḍwālas and some other dynasties. The gold coins that were issued in northern India during the 11th and 12th centuries are however seen to be conforming to quite a new metrology. They are usually about 60 grains in weight and were known as *suvarṇa-drammas.* Half and quarter *drammas* were also issued and have been found in good quantities.

The silver unit of coinage was variously termed as *purāṇa, dharaṇa* or *kārshāpaṇa.* Like the gold unit, technically it was also regarded as weighing 16 *māshas.* But the *māsha* here was a unit of two and not five *rattis,* and so the silver unit weighed 32 *rattis* or about 57 grains only. Its weight was thus two-fifths the weight of the *suvarṇa.* The vast majority of the silver punch-marked coins are seen to be conforming to this standard. The silver coins issued by the Indo-Baktrians first conformed to the Attic and then to the Persian standard. The silver unit, drachm, which was destined to have a very long life in Indian languages in the forms of *dramma* and *dam,* weighed about 67 grains according to the Attic and 86 grains according to the Persian standard. The hemi-drachms issued later by the Indo-Baktrians, the Parthians and the Scythians are however to be seen weighing only about 35 grains. Their weight

seems to have been adjusted to the prevailing prices of the metal. The extensive medieval silver coinage of Rajputana, popularly known as *gadaias,* conform to the standard of 60 grains. The Hindu silver coinage of the 11th and 12th centuries A.D., is seen to be about 10 grains lighter.

The unit of the copper coinage was called *paṇa,* and according to Manu its weight also was 144 grains, or 16 *māshas* of 5 *rattis.* It is usually assumed in works on ancient Indian numismatics that this was the normal weight of the *paṇa,* but such does not seem to have been the case. The commentary on the *Vinayapīṭaka*[4] as well as Gaṅgamālajātaka[5] refer to a bigger *paṇa,* weighing not 16 but 20 *māshas* of five *rattis.* Early Dharmaśāstra writers like Vasishṭha,[6] Gautama[7] and Uśanas[8] are aware of a *paṇa* of 20 *māshas* or 100 *rattis* only. It would therefore appear that the copper *paṇa* in the period before the Christian era was 25 per cent heavier than the one mentioned by Manu. Nor does the metrology referred to by Manu appear to have supplanted the earlier *paṇa* of 20 *māshas*; for it is mentioned by Nārada also.[9] An examination of the copper coins available at present shows that the weight of the *paṇa* must have been sometimes even heavier; we have discovered several pieces of Kushāṇa rulers weighing 240 to 260 grains, i.e., about 26 to 28 *māshas.* And the *Agnipurāṇa* actually refers to a *paṇa* of 24 *māshas.*[10]

Having cleared the preliminary ground by determining the weights of the coins, let us proceed to consider the relative values of gold, silver and copper, and the coins issued in these metals. We shall first take up the question of the relative prices of gold and silver.

From the testimony of Xenophon, we learn that in the ancient Acheminian empire of Persia, 20 silver coins (called siglos), each weighing about 85 grains, were equal in value to one golden coin

---

4 तेन खो पन समयेन राजगहे पंचमासको पादो होति । Vol. III, p. 45.

5 कहापणो अद्धो पादो चत्तारो मासका तयो द्वे एको मासकोति पुच्छि। No. 421 (Vol. III, p. 448). It may be noted here that a quarter *kārshāpaṇa* is stated to be bigger than 4 *māshas* in weight. A full *kārshāpaṇa* must therefore be bigger than 16 *māshas.*

6 Vasishṭha allows a normal interest rate of $1\frac{1}{4}$ per cent per mensem; Cf. वाशिष्ठविहितां वृद्धिं सृजेद्वित्तविवर्धिनीम् । अशीतिभागं गृह्णीयान्मासाद्वार्धुषिकः शते। Manu, VIII, 140. He further says that the interest on 20 *paṇas* would be 5 *māshas*; 20 *paṇas* thus become equal *to* 400 *māshas,* i.e., one *paṇa* equal to 20 and not 16 *māshas.* Cf. पंच माषा तु विंशत्या एवं धर्मो न हीयते। II, 55.

7 Cf. :—कुसीदवृद्धिर्धर्म्या विंशतिः पंचमाषिकी मासम्। I, 2, 26.

8 माषो विंशतिमो भागो ज्ञेयः कार्षापणस्य तु। Occurring in the *Mahābhārata* and quoted in the *Dharmakosha,* I, p. 533.

9 माषो विंशतिभागस्तु पणस्य परिकीर्तितः। Appendix, p. 58.

10 कृष्णलानां तथा षष्ट्या कर्षार्धं राम कीर्तितम्। 227, 1.

(called Daric), weighing about 130 grains. If we ignore the alloy, this would give the ratio between the prices of gold and silver as 1700 : 130 or about 13 : 1. In contemporary Greece the ratio was about 14 : 1, but later on it became 12 : 1. In 306 B.C. it was 10 : 1. This was also the ratio in the time of Augustus ; for one aureus of gold, weighing $\frac{1}{42}$ of a lb., was equal in value to 20 denarii, each weighing $\frac{1}{84}$ of a lb. [11]

It is natural to assume that the Indo-Baktrians continued the old Greek and Persian ratio of one gold coin being the equivalent of 20 silver ones. Their stater weighed 12 oboli or about 130 grains, and drachm 6 oboli or about 65 grains. If the alloy is ignored and 20 drachms are assumed to be equal to one stater, the ratio between the price of gold and silver works out to be 10 : 1. This was true of the early Indo-Baktrian period.

It would thus be seen that silver was relatively dearer in India in terms of gold. That was but natural: for India had some indigenous supply of gold, but practically none whatever of silver. This relative dearness of the white metal continued down to the 1st century A.D. For the author of the *Periplus* informs us that silver could be profitably exchanged for gold in India. [12]

Luckily we have some epigraphical evidence to enlighten us about the relative prices of the two metals, which is almost contemporaneous with that of the *Periplus*. Nasik inscription No. 10 tells us that 70,000 *kārshāpaṇas* were equal in value to 2,000 *suvarṇas* ; 35 *kārshāpaṇas* were thus equal to one *suvarṇa*.[13] If we assume with Dr. D. R. Bhandarkar that the silver *kārshāpaṇas* and the gold *suvarṇas* were the traditional indigenous coins of the weight of 32 and 80 *rattis* respectively, then the ratio between the prices of gold and silver would be 35×32 : 80, *i.e.*, 14 : 1.

This conclusion would however go against the express contemporary statement of the author of the *Periplus* that silver was dearer in India than in the West. I think that we must take the *kārshāpaṇas* and *suvarṇas*, referred to in the Nasik inscription, as denoting not the coins mentioned in Smṛitis, but the currency actually current in contemporary times. At that time the silver currency in vogue in Mahārāshṭra was that of the silver coins, issued by Nahapāna. No indigenous *suvarṇas* of contemporary times are known ; very

---

11 Gardner, *History of Ancient Coinage*, pp. 32-36.

12 Schoff, *The Periplus of the Erythrean Sea*, p. 42.

13 Cf. नियुतं च कर्षापणसहस्राणि सतरि, ७०,०००, पंचत्रिंशकसुवर्ण कृता दिन सुवर्णसहसम् । E. I., Vol. VIII, p. 82 The *Kārshāpaṇa* referred to in this inscription is really the hemidrachm ; the ratio of exchange between *suvarṇa* and drachm would then be 17½ : 1. According to the old Greek and Persian tradition, the gold coin was equal to 20 silver pieces. In India this ratio had now changed to 17½ : 1. It was soon to be 16 : 1, as will be presently shown.

probably the term denotes the golden issues of the Kushāṇas, who were most probably the overlords of the western Kshatrapas. The silver coins of Nahapāṇa weighed not 32 *rattis* or 57 grains but about 35 grains, and the gold coins of the Kushāṇas weighed not 80 *rattis* or 144 grains but about 120 grains. If we accept this metrology,—and it is but natural to do so—the relative ratio between the prices of gold and silver would be 35×35 : 120, *i.e.*, 245 : 24 or about 10 : 1. But we have to make a further allowance for the alloys. The alloy in the silver punch-marked coins was about 20 per cent, and the same was probably the case with the coins of the Kshatrapas. The alloy in the gold coins of Kanishka was about 9 per cent.[14] If we make an allowance for these alloys, the ratio in the prices of the two metals would be about 28×35 : 110, *i.e.*, 9 : 1. In Persia the ratio was 13 : 1 as observed above already; it was thus naturally profitable to exchange silver for gold in India, as the author of the *Periplus* has observed.

Cunningham has come to the conclusion[15] that the ratio of the prices of gold and silver was 8 : 1 on the assumption that the *kārshāpaṇas* contained an alloy of about 20 per cent and that 25 of them, each weighing 32 *rattis,* were equal in value to one *suvarṇa* weighing 80 *rattis.* He has however given no authority for the latter hypothesis.

In the Gupta empire, from *c.* 390 A.D., both the silver and gold coins were current; the weight of the gold coins was in the beginning about 120 grains, but was being gradually increased to 144 grains; that of the silver coins was about 35 grains. We however get no clue giving the relative value of these coins.

In the Baigram copper plate grant of the year 447 A.D., issued in the reign of Kumāragupta I, we get some interesting data to determine the relative prices of gold and silver coins. The donor of the grant is seen purchasing three *kulyāvāpas* of fallow land for six *dīnāras* and $\frac{1}{4}$ *kulyāvāpa* of homestead (*sthala*) land for eight *rūpakas.*[16] Unfortunately the inscription does not expressly state the rate of the homestead land. If however we assume that it was the same as that of the fallow land, then the above data would conclusively show that one *dīnāra* was equal to 16 *rūpakas.*

This conclusion is no doubt a very interesting and valuable one, but it does not enable us to arrive at any precise conclusion about the prices of the two metals. The term *rūpaka* was used to denote the coinage not only in silver but also in other metals as well. The *Arthaśāstra* of Kauṭilya makes this point quite clear.[17] The con-

14 Cunningham, *Coins of Medieval India,* p. 16.
15 *Coins of Ancient India,* p. 5, *Archæological Survey Reports,* Vol. XIV, p. 17.
16 *Epi. Ind.*, Vol. XXI, pp. 81-2.
17 See Bk. II. chaps. 23 and 32.

text of the inscription however makes it quite clear that the term *rūpaka*, as used in it, could be indicating only the silver coins. Gold coins have been already referred to by the record as *dīnāras*, and eight copper coins could not possibly have been the price of $\frac{1}{4}$ *kulyāvāpa* of homestead land.

In the Gupta period, 16 silver coins were then equal to one golden one. If we presume that the golden and silver coins referred to were the traditional pieces weighing 80 and 32 *rattis* respectively, then the ratio between the prices of gold and silver would be 16×32 : 80, *i.e.*, about $6\frac{1}{2}$: 1.

It would however be more reasonable to presume that the Baigram record is referring to the contemporary Gupta gold and silver currency. The average weight of Kumāragupta's silver coins is 35 grains, and that of his gold ones about 125 grains. If these were exchanging at the rate of 16 : 1, then the ratio of the prices of gold and silver would be 35×16 : 125, *i.e.*, about $4\frac{1}{2}$: 1.

The above conclusion however appears rather improbable. The Baigram plates were found in the Bogra district of Bengal and most of the Gupta gold coins found in that province are seen to be heavily alloyed. The coins of Kumāragupta I, however, as heavily alloyed as those of Skandagupta or Narasiṁhagupta, have not yet been discovered. But when we remember how Kaumāragupta I was driven to issue silver-plated coins in the western provinces of his empire, there is nothing improbable in his having issued a heavily alloyed golden currency in the eastern districts of his dominions. Skandagupta and Puragupta may be merely following the example set by Kumāragupta I. Only a few coins of the Kaligat hoard have survived, and it is probable that among the coins that were melted down by the Board of Directors in what Allan has described as a mercenary fit, there may have been some coins of Kumāragupta I as heavily debased as those of Skandagupta or Puragupta.

The alloy in the heavier coins of Skandagupta, Puragupta, Narasiṁhagupta and Kumāragupta II, weighing about 144 grains, is about 50 per cent.[18] If we assume that the Baigram record refers to such heavily alloyed coins of Kumāragupta I, which have not yet been found, but which very probably circulated at the time of that record, then the ratio between the prices of gold and silver would not be as high as $4\frac{1}{2}$: 1. Skandagupta's heavy coins weighing about 140 grains contain only about 73 grains of gold, and the alloy of silver may be approximately about the value of 7 grains in gold. 80 grains of gold would then be equal in value to 35×16 grains of silver; the ratio of prices would be then 7 : 1. I do not know the precise alloy in the silver coins of Kumāragupta I, but assuming that

18 Cunningham, *Coins of Medieval India*, p. 16.

it was to the usual extent of about 20 per cent, then the ratio between the prices of the two metals would be $80 : 28 \times 16$, *i.e.*, $5\frac{1}{2} : 1$.

The above discussion would show that though we have not yet got data that would enable us to come to absolutely convincing results, it appears fairly certain that the prices of silver were higher in the Gupta period than they were in the Kushāṇa age. The ratio of the prices of gold and silver seems to have varied between 7 : 1 and 6 : 1.

India imported her silver supplies to a great extent from Central Asia. The disintegration of the Kushāṇa empire must have interfered with the importation of that metal from Central Asia. This must have resulted in the prices of silver soaring up. There was already a world sho tage of silver in the second century A.D., which had compelled the Roman emperors to debase their silver denarius.[19] The confusion caused by the disappearance of the Kushāna supremacy must have made the white metal rarer still, both in India and outside.

Nārada, Bṛihaspati and Kātyāyana supply some interesting data for determining the relative prices of gold, silver and copper during the period 500-800 A.D., which was the approximate time of the composition of their Smṛitis. Unfortunately these Smṛitis have not been preserved in their original form; they have to be reconstructed by putting together quotations from them as given in later digests and commentaries. This circumstance considerably increases the difficulties of the numismatist in interpreting their evidence. The available evidence however seems to show that the silver had become much cheaper in this period.

A verse which occurs in the Smṛitis of Nārada, Kātyāyana and Bṛihaspati states that four *kārshāpaṇas* are equal to one *aṇḍikā* or *dhānaka*, and that four *dhānakas* are equal to one *suvarṇa* or *dīnara*.[20] Dr. D. R. Bhandarkar holds that the *kārshāpaṇa* here referred to is not a silver but a copper coin, the well known *paṇa* of 80 *rattis*, and therefore concludes that these Smṛitis show that 48 copper coins were equal to one golden *suvarṇa*.[21] As the weight of both the *paṇa* and the *suvarṇa* was 80 *rattis*, this would show that the ratio of the price of gold to that of copper was as low as 48 : 1. The *Bṛihaspati Smṛiti* supports Dr. Bhandarkar's contention; for it first states that the *paṇa* was a copper coin and then adds that it was also known as *aṇḍikā*, 48 of which were equal to one *suvarṇa*.[22] This leaves us no

19 Brown, *The Coins of India*, p. 34.

20 कार्षापणोंऽडिका ज्ञेयास्ताश्चतस्रस्तु धानकाः । ते द्वादश सुवर्णस्तु दीनाराख्यः स एव च ॥
Nārada, Appendix, p. 60.

21 *Ancient Indian Numismatics*, p. 189.

22 निष्कं सुवर्णाश्चत्वारः कार्षिकस्ताम्रिकः पणः । ताम्रकर्षकृता मुद्रा विज्ञेयः कार्षिकः पणः ॥
स एव चंद्रिका प्रोक्ता ताश्चतस्रस्तु धानका । ता द्वादश सुवर्णस्तु दीनाराख्यःस एव तु ॥
Quoted in *Smṛitichandrika*, *Vya*. p. 99.

alternative but to conclude that the ratio between the prices of gold and copper was as low as 48 : 1. Was copper really so dear during the 7th and 8th centuries ?

This conclusion however is untenable in the light of other evidence to which reference will be soon made, which makes it abundantly clear that 48 : 1 or thereabout was the ratio between the prices of silver and copper and not between those of gold and copper. As observed already, Bṛihaspati exists only in quotations, and it would appear that those who have quoted the above passage from his *Smṛiti* have either misquoted him or misplaced the verses. Verses occurring in the same context in Nārada and Kātyāyana suggest that the term *kārshāpaṇa* was intended to denote the silver coin, as is also the usual usage. If we analyse the passage in *Nāradasmṛiti*, Appendix, as given in the S. B. E. version, we find that the verse 57 expressly states that the *kārshāpaṇa* is a silver coin in the southern country. Verse 58 gives the metrology of copper *kārshāpaṇa*, *kākaṇī* and *māsha* and then verse 59 refers to certain peculiarities of the Punjab *kārshāpaṇas*. We are then told that four *kārshāpaṇas* constitute an *aṇḍika* or *dhānaka* and 12 *dhānakas*, a *suvarṇa*.[23] I think that the *kārshāpaṇa* referred to in verse 60 is really the silver coin mentioned in verse 57. We must not forget that the verses in Nārada have been arranged not in their original order, but in that order which appeared most probable to Dr. Jolly. We should therefore presume that verse 60 refers to the silver *kārshāpaṇa* mentioned in verse 57, if we are to avoid the impossible conclusion of gold being only 48 times dearer than copper. It will be presently shown how other evidence renders this conclusion altogether untenable.

Assuming that the *kārshāpaṇa* referred to by Nārada, Kātyāyana and Bṛihaspati in the verse under discussion is the silver coin, we come to the conclusion that 48 silver *kārshāpaṇas* were equal to one gold *suvarṇa* or *dīnāra*. As no golden currency existed in the time of these writers, we may presume that the *suvarṇa* they are referring to is gold bullion weighing about 144 grains. Contemporary silver coins were the Gadaiyās whose normal weight was 60 grains. Allowing for the usual 20 per cent alloy in the silver currency, the statement of Nārada would show that the ratio between the prices of gold and silver was $50 \times 48 : 144$, *i.e.*, about 17 : 1. If we ignore the alloy in the silver coins, then the ratio would be 20 : 1.

---

23 कार्षापणो दक्षिणस्यां दिशि रौप्यः प्रवर्तते । पणैर्निबद्धः पूर्वस्यां विंशतिस्तु पणः स तु ॥ 57.
माषो विंशतिभागस्तु पणस्य परिकीर्तितः । पणस्तु षोडशो भागो ज्ञेयः कार्षापणस्य तु ॥ 58.
काकिणी तु चतुर्भागो माषस्य च पणस्य च । पंचनद्याः प्रदेशे तु संज्ञेयं व्यावहारिकी ॥
कार्षापणप्रमाणं तु निबद्धमिह वै तया । 59.
कार्षापणोऽण्डिका ज्ञेया ताश्चतस्रस्तु धानकाः । ता द्वादश सुवर्णस्तु दीनाराख्य स एव तु ॥ 60.

This would show that silver had now become twice as cheap as it was in the Gupta period.

There is other evidence to show that such was really the case at about the advent of the Muslim rule. Bhāskarāchārya, who flourished in the 12th century A.D., has given the relative value of the coins current in his time. In verse 2 of his *Līlāvatī,* he states that 16 silver *drammas* were equal to one golden *nishka.*[24] Unfortunately he has not given us the weights of these coins referred to by him, but obviously he must be referring to the silver and golden coins current in his age. We have shown already how the unit of both these coinages was a piece of about 60 grains in the 11th and the 12th centuries. Bhāskara's statement that sixteen silver *drammas* were equal to one golden *nishka* would then show that the ratio between the prices of gold and silver was 16 : 1. We have of course made no allowance for the alloy in either coin. Bhāskara therefore supports the conclusion we have drawn from Nārada, Bṛihaspati and Kātyāyana.

We however get a still more decisive confirmation of this conclusion from the data in the *Śukrasmṛiti,* which may be placed towards the end of the Hindu period. Śukra expressly declares that gold was sixteen times costlier than silver.[25] This statement is explicit ; we have not to speculate about the probable weight of any coins referred to or the alloy they might have contained. It is therefore clear that towards the end of the Hindu period the prices of the white metal had fallen, and that it was as much as 16 times cheaper than gold. The conclusion to nearly the same effect which we had above drawn from Nārada, Bṛihaspati and Kātyāyana is therefore a correct one, though we had to rely upon rather ambiguous data.

The above conclusion hold good of northern India. In the extreme south silver was very rare. No silver currency is known to have prevailed in the Sātavāhana, Chola, Pāṇḍya and Kerala kingdoms. Silver coins of Gautamīputra Sātakarṇi and Yajñaśrī Sātakarṇi were due to the temporary influence of Kashtrapa currency. Silver punch marked coins are sometimes found in south India, but their number is very small. The Rājarājeśvara temple at Tanjore has a number of inscriptions recording presents of ornaments and utensils to the deity. They are however all gold ; silver ones appear but once only. The editor has justly observed, "It looks as if the king

---

24 वराटकानां दशकद्वयं यत्सा काकिणी ताश्च पणश्चतस्रः ।
ते षोडश द्रंम इहावगम्यो द्रंमैस्तथा षोडशभिश्च निष्कः ॥ Chap. I, verse 2.

25 रजतं षोडषगुणं भवेत्स्वर्णस्य मूल्यकं । ताम्रं रजतमूल्यं स्यात्प्रायोऽशीतिगुणं तथा ॥
IV, 2, 92-3.

had more gold and precious stones at his disposal than silver."[26] It is curious to note that when silver utensils are mentioned, the king takes particular care to state the sources from which they were obtained[27]; this would seem to show that they were a greater rarity than the golden ornaments and utensils. In the immense plunder that Malikafur carried away from the south, there was hardly any silver; it consisted mostly of gold, pearls and precious stones.

It is therefore but natural that silver should be much dearer in the south than it was in the north. We have however no definite reliable information on the point. In *South Indian Epigraphy Report* for 1915 the summary of an inscription of Kulottuṅga I, dated in his 29th year (1099 A.D.), has been given, in the course of which we are told that one *kāśu* of gold could purchase 30 *palams* of copper and 26 *palams* of silver.[28] This record would show that copper was almost as dear as silver, and that one *kāśu*, i.e., about 25 grains of gold[29] were equal in value to 26 *palams*, i.e., 104 *paṇas*, i.e., 104 × 144, *i.e.*, 14,976 grains of silver. This would show the ratio between gold and silver prices to be something like 800 : 1! Such was never the case at any time in ancient or modern history.

Thinking that there was some obvious mistake in the summary of the record, as published in the *South Indian Inscriptions*, I made further enquiries in the matter; but Rai Bahadur C. R. Krishnamacharlu, Superintendent for Epigraphy, assured me that the summary was substantially correct as far as the readings in the inscription were concerned. For the text of the record reads as follows:—

Kāśu oṉ ṟukku śembu niṟai muppadiṉ palamāga, at the rate of 30 *palams* of copper for one *kāśu*.

Veḷḷi niṟai irupadiṉpalattukku kāśu mukkālum, at the rate of ¾ *kāśu* for 20 *palams* of silver.

As Rai Bahadur C. R. Krishnamacharlu has suggested in his letter, we shall have to suppose that a mistake may have crept in the inscription itself when it was quoting the relative prices, or the weight of *palam* in the case of copper may have been much heavier than what it was in the case of silver. We have already seen above how *māsha* weighed only two *rattis* in the case of silver, but five *rattis* in the case of gold and copper. It is clear that we cannot conclude from this record that copper was almost as dear as silver, and that the latter was about 800 times cheaper than gold.

---

26 *S. I. I.*, Vol. II, p. 416.

27 Cf. "The sacred silver utensils presented from his own treasures, those seized from the Chera king and the Pandyas in Malai Nadu and those acquired as booty after defeating the same enemies." It would thus appear that the Pandyas and Keralas had some silver, probably imported from abroad. *Ibid*, p. 419.

28 *Op. cit.*, p. 198.

29 Usually one *kāśu* was equal to ⅓ of a *kaḷañju* weighing about 50 grains; but this record expressly describes its *kāśu* as being one half of a *kaḷañju*.

It may not be out of place here to refer briefly to some data about the relative prices of gold and silver in the Muslim period also. The *Imperial Gazetter* states that the ratio of these prices was about 8 : 1 in *c.* 1200 A.D., but fell to 7 : 1 after Alauddin's conquest of the Deccan, which resulted in the importation of vast quantities of gold, looted from the southern countries. At the time of Sher Shah, the ratio rose to 9·4 : 1.[30] This would show that silver became twice as dear after the Muslim conquest as it was before it. With the establishment of the Moghul rule, the prices of silver went down. From Tavernier, who visited India towards the middle of the 17th century, we learn that 14 silver rupees were equal in value to one golden one. As the weight of both the rupees was practically the same, we may take it that the ratio of the prices of gold and silver was 14 : 1. Later on silver became somewhat cheaper still; at the beginning of the 19th century it could be purchased at the rate of about Rs. 16 per tola.

Relative Prices of Silver and Copper.

Let us now proceed to consider the relative prices of silver and copper. A quotation from *Hārīta Dharma Sūtra*, preserved by the *Vyavahārakalpataru*, supplies us the earliest available data on this point. It states that the legal rate of interest was eight (copper) *paṇas* per month on a capital of 25 (silver) *purāṇas*, and proceeds to add that on this calculation the capital would be doubled in 4 years and 2 months, *i.e.*, in 50 months.[31] The interest in 50 months would be 400 (copper) *paṇas* and they would thus be equal to 25 (silver) *purāṇas*. One *purāna* would thus be equal to 16 *paṇas*. This would remind us of the present day currency according to which one four anna piece is equal to 16 copper *paisas*. The *purāna* of Hārīta weighed 32 *rattis*, and *pana* 20 *māshas* or 100 *rattis*. The *purāṇa* further contained an alloy of about 20 per cent. The data of Hārīta would thus show that about 25 *rattis* of silver would be equal to 1600 *rattis* of copper; the ratio of their prices would thus be in the vicinity of 1 : 64. At this early period the ratio between the prices of gold and silver was in the vicinity of 1:10; the relative prices of the three metals would then be 1 : 10 : 640.

The Indo-Baktrians, the Indo-Scythians and the Indo-Parthians have issued very extensive coinage in silver and copper; we however get no clue to ascertain the relative prices of their silver and copper currency. The silver coinage is on the whole seen to be following an intelligible weight system, but the same can hardly be

---

30 *Op. cit.*, Vol. IV, pp. 513-4.

31 पुराणपंचविशत्यां मासेऽष्टपणा वृद्धिः । एंव सद्विमासकैश्चतुर्भिर्वर्षैर्द्विर्त्वमायातं संतिष्ठते ।
Quoted in *Vyavahārakalpataru*, p. 106.

said to be the case with reference to the copper issues. The Smṛitis refer to copper *paṇas* of 144 and 180 grains, but heavier *paṇas* were circulating in the reigns of Apollodotus and Menander, who have issued a large number of copper pieces weighing in the vicinity of 240 grains. A large number of Kushāṇa copper coins weigh 260 and 130 grains, showing thereby that the copper unit at this time was of 260 grains. These Greek and Kushāṇa pieces of 240 and 260 grains would be of 26 and 28 *māshas*; they would thus be *paṇas* heavier than those of 24 *māshas* mentioned by the *Agni-purāṇa*.[32]

The silver drachm had appreciated in weight during this period and used to be of 75 grains.[33] If we assume that the old ratio between the silver and copper units of 16 : 1, which prevails still to-day, was holding good at this time also, then the silver drachm of 75 grains would be equal to 16 copper *paṇas*, each equal to about 250 grains in weight. Allowing for an alloy of 20 per cent in the silver unit, this would show that 60 grains of silver would be equal to 16×250 grains of copper. The ratio between the relative prices would be about 66 : 1.[34] This ratio is nearly the same as the one we have deduced from the data in the Smṛitis.

The next clue to the prices of silver and copper is to be obtained from *Nāradasmṛiti*, which states that one silver *kārshāpana* was equal to 16 copper *paṇas* as a general rule, but equal to 20 *paṇas* in the east. If we ignore the alloy in the silver coin, and assume that the copper coin was of 80 and not 100 *rattis*, this would show that 32 *rattis* of silver were equal in value to 16×80, *i.e.*, 1,280 *rattis* of copper. This would give a ratio of 1 : 40, which is rather high. This ratio would be 1 : 50 if we allow for the usual 20 per cent alloy in the silver coin, and 1 : 62, if we assume that the copper *paṇa* was 100 *rattis* in weight. Nārada expressly states that the *paṇa* was of 20 *māshas* (*ante, p. n.*); so the last-mentioned conclusion would seem to be the most probable one.

In the east, one silver *kārshāpaṇa* was worth 20 *paṇas* of copper. It is possible that this was the case because the copper *paṇa* there was smaller. If however such was not the case, the ratio of the silver and copper prices there would be in the vicinity of 80 : 1.

The *Śukranīti* expressly declares that silver was 80 times dearer than copper.[35] This price ratio would correspond to that prevailing in the east according to Nārada.

---

32 *Ante*, p. 3, n. 10.

33 I do not think it probable that the 75 grain pieces were intended to pass for diadrachms.

34 This conclusion is only tentative. It is possible to argue that 240 grain pieces were $1\frac{1}{2}$ *paṇa* pieces or $1\frac{1}{3}$ *paṇa* pieces, as Cunningham has done. I however think this theory very improbable.

35 ताम्रं रजतमूल्यं स्यात्प्रायोशीतिगुणं तथा । IV, 2. 92.

The *Medinī* states that one silver *dramma* was equal to 16 copper *paṇas*[36]; the *Līlāvatī* of Bhāskarāchārya also gives the same ratio.[37] The silver unit in the currency at the time of Bhāskarāchārya was of about 50 grains; and allowing for an alloy of 20 per cent, the data in *Līlāvatī* would show that 40 grains of silver were equal in value to 16×140 grains of copper. The ratio in the prices of the two metals would thus be 1 : 56. This is a much higher ratio than the one mentioned by Śukra. We however do not know what was the unit of the copper currency actually in vogue in the time of the *Līlāvatī*. If we assume that it was a *paṇa* of 20 and not 16 *māshas*, then the ratio between the prices of the two metals would be about 1 : 70.

The above discussion will show that the ratio between the prices of silver and copper usually varied from 1 : 60 to 1 : 80. There were two verses in the *Bṛihaspatismṛiti*, which clearly seemed to indicate that the ratio between the prices of gold and copper was 48 : 1. It must have now become clear how the inference that can be legitimately drawn from the above verses in Bṛihaspati is utterly irreconcilable with the information supplied by all other reliable sources. We are therefore perfectly justified in assuming that the verses in Bṛihaspati are placed in a wrong juxtaposition by Dr. Jolly, or that they are misquoted by the later writers.

In conclusion we may briefly refer to the relative prices of silver and copper in the Muslim period. Thomas has shown that the ratio between the prices of silver and copper was about 1 : 72 during the reign of Sher Shah. This ratio is in the vicinity of the one indicated by Śukra. In the reign of Akbar one rupee of 180 grains was equal to 40 *dāms* of 320 grains. If we ignore the alloy in the rupee, this gives the ratio between the prices of the two metals as 1 : 70. At the time of Tavernier (c. 1650 A.D.) copper seems to have become cheaper, for he states that one rupee exchanged for 49 copper *dāms* at Surat and 55 at Agra. In the reign of Aurangzeb the copper prices soared so high that the emperor was compelled to reduce the weight of his copper *dām* by 33 per cent. The ratio of their prices seems to have been in the vicinity of 1 : 48.

---

36 कार्षापणोऽस्त्री कर्षिके पणषोडशकेऽपि वा । *Padvika*, v. 92

37 *Ante*, p. 9, n. 24.

PAILA HOARD OF PUNCH-MARKED COINS.

By E. H. C. Walsh, I.C.S. (Retired).

In this paper an examination is made of a hoard of 1014 Silver Punch-marked coins found at Paila in the Kheri District of the United Provinces in 1922. The hoard, which was preserved in an earthen pot, originally contained 1245 coins; only 1014 of them were however available for examination.[1]

The coins are in a remarkably good state of preservation and are of especial interest as they are of a distinct type, no examples of which had been found up to their discovery; as they bear a group of four marks only on the obverse, instead of the group of five marks which characterises other punch-marked coins that have been found throughout India, and also are of a different standard of weight of about 42 grains, and are therefore distinct from the *Paṇa, Kārshāpaṇa, Purāṇa* of about 52 grains or 32 Ratis of Manu's standard to which all the Five Mark Punch-marked coins belong. From their provenance, and that of similar coins which have since been found, they would appear to be coins of the ancient kingdom of Kośala, before its conquest by the kingdom of Magadha and its subsequent inclusion in the Mauryan Empire.

Introductory

These coins were originally examined by the late Mr. W. E. M. Campbell, I.C.S., who, unfortunately was not able to publish the results of his examination before his death in 1923. After his death, I offered to make an examination and classification of the coins, and was asked by the Committee of the Provincial Museum to do so. The coins together with others which had been with Mr. Campbell, were deposited in the British Museum, and were made over to me by its authorities. Mr. Campbell had arranged the coins into eight classes but had left no notes or papers of any kind with them.

In 1917, however, when I was engaged in examining a hoard of silver punch-marked coins found at Golakhpur in Patna city, Mr. Campbell had kindly sent for my perusal his Treasure Trove Report and the notes which he had made up to that time, on the present coins, and I kept notes of them, and returned them to him. I have included those notes of Mr. Campbell's in my paper on the Golakhpur

---

1 [Some coins of this class which have been recently published by Mr. Durga Prasad (*Num. Sup.* XLV, pp. 12-13 & Pl. VI) probably represent a portion of the missing part of this hoard.—Editor, A.S.A.]

coins, in the Journal of the Bihar and Orissa Research Society, 1919. In that paper, referring to my conclusion from the Golakhpur coins that the marks on the obverse of punch-marked coins occur in regular groups, which, at that time, was not generally recognized,[2] I wrote, with reference to Mr. Campbell's notes on the present coins, as follows :—

"Mr. W. E. M. Campbell, I.C.S., has also come to the same conclusion from the examination of a most extensive and important find of 1,245 punch-marked coins at Paila in the Kheri District of the United Provinces," [3] and "Mr. Campbell has kindly let me see his Treasure Trove Report and his notes on the Paila coins. He has found that they bear a group of 4 marks on the obverse, which is constant for each class of coins, and has classified them according to such groups, as follows :—

Class I, 291 coins ; Class II, 481 coins ; Class III, 254 coins ; Class IV, 5 coins ; Class IV-A, 6 coins ; Class V, 44 coins ; Class VI, 4 coins ; Class VII, 2 coins ; Class VIII, 1 coin ; coins of the type of Class I, II or III, but with distinctive symbol missing or obscure, 138 coins ; the remainder being 12 broken pieces and 7 corroded.

"Mr. Campbell has also let me see the list of the figures of the marks on these coins.

"It is to be hoped that he will publish the result of his examination, which will be a most valuable contribution to the subject."

"That there is no general uniformity amongst the reverse marks is also the case in the coins found at Paila. Mr. Campbell's Treasure Trove Report, and his list of marks, which he has kindly let me see, show that while, as already noted, only 13 marks occur in certain fixed groups on the obverse of 1,226 coins, no less than 89 marks, in which also all varieties of the same object have been included under one number, occur on the reverse." [4]

Unfortunately, Mr. Campbell did not live to complete and publish his examination of the coins.

The further examination of the present 1014 coins shows that the number of decipherable reverse marks or groups of marks, as shown in Plates II, III, IV of the Reverse Marks, amounts to 199 and the total number of the Reverse Marks included in the above groups is 417. And in addition to these there are many varieties on the different punches of some of the marks shown in the Table.

---

[2] [The late Dr. Spooner was the first scholar to draw attention to this important circumstance in his paper on the Peshawar Government House Hoard of punch-marked coins published in *A.R.*, A.S.I., 1905-6, at p. 151.—Editor, A.S.A.]

[3] *J. B. O. R. S.*, 1919, p. 20.

[4] *Ibid.*, p. 39.

I further found that the coins had to be divided into thirteen classes and not eight as they were divided by Mr. Campbell. And it will be seen, from the respective number of coins in the eight classes which Mr. Campbell proposed, that his arrangement differed materially from my present classification, though they are both on the same principle, being based in each case on the fixed groups of the Four Obverse Marks. As regards the present classification, however, and all the conclusions drawn from it, and from the examination of the coins, I am solely responsible.

The total number of the coins, as then given by Mr. Campbell, is 1245, whereas the total number of the coins received by me was only 1014. In the coins which I received Mr. Campbell had placed apart certain coins which he had allotted for distribution to the various Museums. I found it necessary, however, for the classification and arrangement of the coins, to include these in the general list of the coins.

Among the coins which I received, Mr. Campbell had also put apart in separate envelopes 36 coins containing 20 different "Types" of the Mark of the Elephant which he had noticed on the coins. With regard to these I wrote in my Report to the Museum:—"On some of the envelopes of the coins of Classes I—V, I have noted "Elephant Type (—)" or "Elephant Die (—)." This refers to 36 coins of one or other of those classes, which had been placed together by Mr. Campbell, as representing the different types of the Elephant (Mark No. 3), which he had found on the coins. I found, however, on going through the coins, that those dies only represent some of the many different dies of the Elephant Mark occurring on the 990 coins comprised in those classes, and that the difference of those particular dies in no way affected the classification, and they had to be separated for the purpose of including them in their respective classes."

I have, however, made casts of the coins bearing the more distinctive of those types, and they are shown on the Plates of the coins, and different types are noted in the description of the Plates of the coins.

I completed the examination of the coins in 1928 and forwarded them to the Lucknow Provincial Museum with a full report and with the present Plate I of the Obverse Marks and the classification of the coins, and with each coin placed in a separate envelope with the Class, Obverse Marks, Reverse Marks, Weights, and other particulars noted on them. Nothing which has since been published leads me to alter or modify the conclusions contained in that report, which, together with such conclusions and observations as arise from it, is contained in the present paper.

The Classification of the Coins.

THE OBVERSE MARKS.

The coins all bear a Group of Four Marks on the obverse, and fall into classes which bear the same fixed group of marks. There are thus thirteen classes. The obverse marks and the classification of the coins are shown on Plate I.

Thirteen different obverse marks occur on the coins ; they are as follows :—

Mark 1. Three Serpentines round a Central Boss. This mark occurs on all the coins and is the distinctive mark of this coinage.

The mark, as it occurs on the Later Coins, is clear on Pl. V, 26 and 28, and VI, 20 and 23. The mark is of larger size on the Older Classes of the coins, as will be seen on Pl. VII, 6 (Class X) and 14 (Class XII), on which it is 13 *mm.* and 16 *mm.* in diameter respectively, as compared, for example, with Pl. VI, 23 (Class IIa) on which it is only 11 *mm.*

Mark 2. A Taurine occurs in two forms ; namely 2a, enclosed in a Shield, in the Later Classes I to VIII, and 2b, of larger size and without the Shield in the Older Classes IX to XIII.

The mark 2a is clear on Pl. V, 21 and 32 on both of which it occurs twice, and Pl. VI, 9 ; and in the older form, 2b, on Pl. VII, 5 (along the bottom left corner) and VII, 12 (at the top left corner of the coin).

Mark 3. (Classes I to V.) An Elephant, facing either to the right or to the left. This mark occurs in Classes I to V. I have therefore divided each of those classes into Sub-Classes *a*, in which the Elephant faces to the right, and *b*, in which it faces to the left, and *c*, in which the mark is not sufficiently clear, or complete, to decide the direction in which it faces. The different direction of the Elephant would appear to show a different issue of those coinages. In class V, the Elephant faces only to the left. On four coins of Class III, Nos. 939, 940, 941 and 941A the mark does not appear.

The Elephant is of a great number of different types. This is not, however, peculiar to the Elephant, but applies equally to the other marks. It is, in fact, difficult to find a number of any mark which have been stamped with an identical punch. This is to be expected, as the number of punches in use at the same time must have been very great, and each one must have been individually cut.

The Elephant occurs both Tusked and Tuskless. An example of a dumpy tusked form will be seen on Pl. V, 1 and of a lanky tusked one on Pl. V, 10 and 21 ; and of a dumpy tuskless form on Pl. V, 8, and of a lanky tuskless one on Pl. V, 2 and 3, and Pl. VI, 3.

A special variety of the mark, with two dots above the Elephant, occurs on two coins of Class IIa, Nos. 476 and 477, which are of different punches, and with three dots above the Elephant on two coins of Class IIa, Nos. 517 and 518. As the design is different, they would appear to indicate different issues of the Class II coinage.

Mark 4. (Class I.) A Pentagram. This mark occurs in two forms, the one plain, and the other with a dot in each of the angles, and these would appear to indicate different issues of the coinages. The Pentagram-with-Dots, occurs on 81 of the 470 coins in Class I, namely on 15 in Class Ia, on 48 square and 13 round coins in Class Ib, and on 5 coins in Class Ic. They are noted in the List of the Coins.

The form of the incuse of the Pentagram also varies, being circular ○, pentagonal ⬠, or indented ☆, showing the use of different punches.

The Pentagram does not occur on any of the British Museum punch-marked coins, or on any of the Five Mark coins of which I am aware. It is not peculiar to India, and was a magic symbol known in the West, as the Pentagram, Pentacle, Pentalpha, and "The Wizard's Foot." It is not possible to attribute any particular significance to it on the present coins.

Mark 5. (Class II.) A Circle and a Crescent, with an Arrow-head on either side between them. They appear to represent the Sun and Moon.

Mark 6. (Class III.) A Hare seated on its haunches. I take this animal to be a hare, and not a dog, because the hare (*Śaśa*) is associated with the Moon (*Śaśī*, *Śaśadhara.*) and also from the sticking-up ears, and the short up-curved scut of the tail.

Mark 7. (Classes IV and VI.) A Humped Bull facing to the left. As on all other punch-marked coins, the horns of the Bull curve forward, namely, downwards towards the head. This would appear to be with the object of distinguishing this mark from the elephant, on which the tusks curve upwards, when only a portion of the mark appears on the coin.

The Bull occurs, both in a Dumpy type as on Pl. VI, 12 and 13, which are both of an identical punch, and Pl. VI, 14 ; and in a Lanky type as on Pl. VI, 23 and 24.

Mark 8. (Class V, VI, VII and VIII.) A Circle and a Crescent. The components of this mark are similar to **Mark 5**, without the arrow-heads (Pl. VI, 17 and 25), and with a dot in the centre of the circle (Pl. VI, 24).

Mark 9. (Class VII.) A Palm-Tree (Pl. VI, 25).

Mark 10. A Tree. (Class VIII.) Pl. VI, 26 and 27, which are of different punches.

Mark 11. (Classes IX to XIII.) A Hexagon formed by two Triangles, with a Dot in the centre. It is difficult to get a clear example of this mark, as the coins on which it occurs are old and worn. It is clearest on Pl. VII, 15 and 16. The only Five-Mark Punch-marked coins on which this mark occurs are the Golakhpur Hoard, found at Patna.[5] This symbol is not peculiar to India ; it also occurs in the West, where, as a magical symbol it is known as "Solomon's Seal."

Mark 12. (Class IX.) A Wheel (Pl. VI, 23) on the "Reverse," namely the Older Obverse of that Double-Obverse coin, and on Pl. VII, 1, 2 and 3.

Mark 13. (Classes X to XIII.) A Circle with Curved Foliations round it. This mark occurs in different varieties in the above classes, for which reason they have been shown as separate classes. But they would appear to be different varieties of the same mark, in which case Classes X, XI, XII and XIII should be considered as one Class. The mark, Class X, is shown on Pl. VII, 5, on which it is clear, and on Pl. VII, 6 (bottom left hand). Class XI can be seen on Pl. VII, 7 along the top, on Pl. VII, 8 at top left corner, on Pl. VII, 9 at the bottom, on Pl. VII, 11 at the bottom right edge, and on Pl. VII, 12 on centre left. And Class XII appears on Pl. VII, 14 on the top left edge and on Pl. VII. 15 on the top right hand. On these old coins, the marks are much worn.

THE ORDER OF STAMPING THE MARKS.

The order of stamping the marks cannot be determined from the coins. In these large coins bearing only four marks, there is more room for the marks, and consequently much less overstamping than on the coins bearing five marks.

Mark 1, The Serpentines, is stamped over another mark on 6 coins :—Over the Elephant on three coins, Nos. 517, 624 (Pl. V, 34) and 868 ; over the Pentagram on two coins, Nos. 5 and 298 ; and over the Hare (Mark 6) on one coin, No. 815.

Mark 2, Taurine-in-Shield, is stamped over another mark on 4 coins:—Nos. 642 (Pl. V, 32), 815 and 868 ; and over Mark 5 on coin No. 518.

The Elephant is stamped over another mark on 6 coins ; over the Serpentines on coin No. 6 ; over the Pentagram Plain on two coins, Nos. 5 and 177 ; over the Pentagram with Dots on two coins, Nos. 4 and 298, and over Mark 5 on Coin No. 518.

The Pentagram Plain is stamped over another mark, the Elephant, on one coin No. 6.

---

[5] *J. B. O. R. S.*, 1919, pp. 16—72, Pl. IV, Fig. 4.

The Hare is stamped over another mark, the Elephant, on one coin, No. 912 (Pl. VI, 8).

In some cases the same mark has been stamped twice on the same coin, though this is never the case with the Serpentines. The Taurine-in-Shield is stamped twice on four coins :—No. 530 (Class II a) Pl. V, 21 ; No. 642 (Class II b) Pl. V, 32 ; No. 941 A. (Class III c) ; and No. 973 (Class V b) a Double-Obverse Coin, one of them stamped over the older Plain Taurine.

The Elephant is stamped twice on coin No. 912 (Class III b) Pl. VI, 8. The Pentagram is stamped twice on coin No. 429 (Class I b), Pl. V, 15.

The Elephant does not appear on three coins, Nos. 939, 940, and 941 (Class III c).

THE SIGNIFICANCE OF THE MARKS.

The Serpentines (Mark 1) occurs on all the present coins. It also occurs on all the 25 coins of similar type obtained from Mathura, illustrated by Mr. Durga Prasad (*Num. Sup.* XLV, Pl. XXXI; and on the 12 coins of this type in the Lucknow Museum, illustrated by him in his Plates I, II and III, [6] and on 5 coins obtained from Lucknow, on his Plate VI. It does not occur on any of the Five-Mark Punch-marked coins. It may therefore be taken as the distinctive mark of the kingdom of Kośala.

Two of the above coins are coins of the present classes :— The coin on his Plate VI, 1, is a coin of Class Ia, and the coin on his Plate VI, 3 is a coin of Class IIa . Mark 4 only partly appears on the edge of that coin, with the crescent side only showing, and consequently has been incorrectly drawn on that Plate as consisting of two crescents with the arrow-heads.

Cunningham has also illustrated a coin of Class Ia in his examples of punch-marked coins on *CAI.*, Pl. I, No. 10.

The Taurine (Mark 2 a, and b), which also occurs on all the coins, is of general occurrence on all punch-marked coins, both as an Obverse and a Reverse Mark, both by itself and as forming part of other marks. No special significance can, therefore, be attached to it. It appears to be merely a propitious or protective mark, similar to the Horseshoe in Europe. I would here observe that Mr. Durga Prasad considered that this Mark is not a Taurine, and considers it to be the Brāhmī letter M. [7] The Taurine, however, is a solid dot with crescent-like horns above, , while the Brāhmī letter

6 Mr. Durga Prasad's Plates I, II and III must be viewed from the top, so as to obtain the coins in relief, and to identify the marks.

7 *Num. Sup.* XIV, 1935, p. 17, and pp. 47—51.

M is always a hollow loop, ♉ and, in that form, occurs on punch-marked coins as a Reverse Mark. Also there is no reason why the Brāhmī letter M should form a part of the many different symbols of which the Taurine forms a part, on punch-marked coins. The Taurine is also distinct from the Nandīpāda . The taurine is a symbol which is not peculiar to India, but, like the Triskelis, which also forms part of different symbols in punch-marked coins, is found throughout the prehistoric world.

The Elephant is of general occurrence on punch-marked coins. It is a symbol of royalty in India. From Kauṭilya's *Arthaśāstra* we know that while coinage was a royal prerogative in ancient India, the right to coin was also delegated to local authorities. This would also appear to have been the case in the ancient kingdom of Kośala, in regard to which the Cambridge History of India, after reviewing the ancient references, notes "Kośala was the most important of the kingdoms in North India during the lifetime of the Buddha . . . At the same time it is not probable that the administration was very much centralized. The instance of the very thorough Home Rule enjoyed, as we have seen, by the Sākiyas should make us alive to the greater probability that autonomous local bodies, with larger powers than the village communities, which were, of course, left undisturbed, were still in existence throughout this wide territory." [8]

From the examination of 1171 Pre-Mauryan Punch-marked coins found in the Bhiṛ-Mound at Taxila, [9] I came to the conclusion that the Elephant may indicate coins struck at the royal mint, to distinguish them from those issued by authorized Local Authorities. This may also be its significance on the present coins.

A passage in the *Vissuddhimagga* of Buddhaghosha, quoted by Dr. D. R. Bhandarkar, states with reference to punch-marked coins that whereas the marks on them might appear to be meaningless to an ordinary person, a shroff "would be in a position to decide, after handling the coins in a variety of ways, which of them were struck at which village, borough, town, mountain and river bank, and also by what mint-master." [10] The marks, therefore, indicate both the Authorities and the Localities of the coins. The Locality Marks may be such as rivers (as on the Erān coins), or hills, namely the Hill-Mark specially designated by some special symbol attached to it, such as a Hare, or a Bull, or a Tree on it, or a River or a Tank attached to it or a Tank by itself, or a special Tree by itself. In

---

8 *Cambridge History of India,* Vol. I, p. 178.

9 Memoirs of the Archæological Survey of India, No. 59, *Punch-marked coins from Taxlia.*

10 "Excavations at Besnagar" by D.R. Bhandarkar, M.A., in *A.R., A.S.I.* 1913-14, p. 212.

the case of the Five-Mark coins it is often possible to assign such Locality Marks, and in the case of the Bhir-Mound coins, I have made their classification on that basis. But in the case of the present coins there is no mark which appears to be a Locality Mark, unless, possibly, the Palm-Tree (Mark 9) and the other Tree (Mark 10). And, with the exception of the Serpentines (Mark 1), none of the other marks can be definitely assigned as Authority Marks.

THE RELATIVE AGE OF THE COINS.

The Classes of the coins have been arranged mainly according to the number of coins comprised in them ; thus Class I contains 469 coins, Class II 282 coins, and Class III 206 coins. The coins within each Class have been arranged according to the number of marks on the reverse, which indicate the length of time that they were in circulation. In Table A is given a statement of the number of coins in each class bearing the respective number of Reverse Marks. Judged on this basis the different classes of the coins fall into the following chronological order, beginning from the most recent Class III, then Class I, followed in progressive order by Classes IV, VIII, VI, VII, II and V. All these Classes bear the mark of the Taurine-in-Shield.

On the Blank Reverses of some coins of Classes I, III and IV there are excrescences, caused apparently by hollows in the surface on which the plate of the coins was beaten out, and the fact that these have not been worn down shows that the coin had had little circulation. Some examples of such reverses of Classes III and IV, are shown on Plate VII, 17, 18, 19, 20. They are distinguishable from punch-marks, as they project above the surface of the coin, whereas the punch-mark is in relief on a sunk incuse and never projects above the surface of the coin.

The coins of Classes IX to XIII, which bear the mark of the Hexagon and of the Taurine of larger size and without the Shield, are distinctly older than the other Classes. This is also shown by the fact that certain coins bearing the Obverse of Classes V, VI and VII have been restruck on the Reverse of an older coin of Class IX, the worn Obverse of which appears as the Reverse of the later coins. These coins are shown on Plate VI, 15, 20, 22, 23, 24 and 25. The reverse marks stamped over the older obverse during its subsequent circulation will be noticed.

Other coins of these older classes are shown on Plate VII, 9, 10, 11, 12, 13, 14, 15, on which the great number of reverse marks can be seen, showing a very long period of circulation. The length of time between the original date of these coins and of those current at the date of deposit in the hoard must be very considerable.

On the other hand, there are certain coins of Class IX which show that they have had little circulation. These are No. 989 (Pl. VII, 1) with clear obverse and blank reverse ; Nos. 990 and 991 (Pl. VII, 3 and 4) with three reverse marks, and No. 992 (Pl. VII), with two reverse marks. This would show, either that the coinage bearing the marks of Class IX continued over a long period, or, which is probably more likely, that those coins had been placed in a hoard at an earlier date, and so were withdrawn from circulation. A hoard was not all deposited at the same time, but was rather of the nature of a family bank in which deposits were made from time to time and may have been made in successive generations, and from which money would be withdrawn as it was required, and that not in the order in which it was deposited in the hoard.

DOUBLE-OBVERSE COINS.

The Double-Obverse Coins are as follows :—

Coin No.	Later Obverse.	Earlier Obverse.
973	Class V b.	Class IX. Pl. VI, 15.
979	Class V b.	Class IX. Pl. VI, 20.
983	Class VI.	Class IX. Pl. VI, 22.
984	Class VI.	Class IX. Pl. VI, 23.
985	Class VI.	Class IX. Pl. VI, 24.
986	Class VII.	Class IX. Pl. VI, 25.
994	Class XI.	Classes IX to XIII, probably Class IX, Pl. VII, 6.

SQUARE AND ROUND COINS.

As in other hoards of punch-marked coins, the coins of the present hoard are both square and round or rounded. The square and round coins are shown separately under each Class and Sub-Class in the list of the coins and are arranged according to the number of their Reverse Marks. They are also shown separately in Table A, which shows the coins in each Class according to the number of Reverse Marks on them, showing their length of circulation. From this it will be seen that the two forms of coins were in circulation together at the same time, though the square coins are more numerous than the round. No reason can yet be assigned for the concurrent issue of these two forms. There are no round coins in the present Classes V and VI.

There can be little doubt that, the "Square" coins were chiselled out of flat plates of metal. In most cases the cutting of the chisel

did not go right through the plate, and the flans were then broken off; for the edges of many coins show a sloping clean section for half the thickness, while the remainder of the edge is rough. The edges of many of the coins also show that the weight was subsequently adjusted by cutting off the corners with a chisel, if necessary.

The method of manufacture of the round coins is not easy to decide. They are generally oval in shape. The possible methods are (1) stamping out of a flat plate of metal, (2) cutting an oval or round shape, or (3) by beating out a spherical lump of metal. The first may be dismissed, as in that case the shape and size of the coins would be more uniform than they are. If they were cut from the sheet, the evenness of the curved edge shows that they must have been cut with shears and not with a chisel as in the case of the square coins. But, from the regularity of the curved edge, it would appear that they were made from globules of molten metal of the required weight, either made in a mould, or dropped into water, as in the case of shot, which were then beaten out flat.

OBVERSE MARKS ON THE REVERSE.

In the case of the Five-Mark coins certain of the obverse marks occasionally occur, in a smaller size, on the reverse of other coins, but never on the reverse of a coin on which they appear as an Obverse Mark. It therefore appears, in respect of those coins, that their significance might be to authorize the circulation of those coins of another area in the area indicated by the said mark. In the Bhir-Mound there are eleven of the Obverse Marks which so occur. In the present coins, only two Obverse Marks occur—the Elephant and the Bull.

The Tusked Elephant facing left (Mark 91 a), occurs on one coin No. 401 (Class Ib), and Tuskless Elephant facing left (Mark 91b) occurs on one coin No. 619 (Class Ib); and the Bull (Mark 7) occurs as Reverse Mark 93c on Coins No. 994 of Class XI (Pl. VII, 6) and No. 1003 of Class XII (Pl. VII, 15), and as Reverse Mark No. 93d on the above coin No. 1003.

Mr. Durga Prasad [11] has also given examples of three other obverse marks which occur on the Reverse of other coins of the present type—namely the Serpentines (Mark 1), the Taurine, and another mark which does not occur on the present coins. The Taurine, however, is of such general occurrence and the most common Reverse Mark on all coins, that it cannot in any case be considered as being an Obverse Mark on the Reverse.

---

11 *Num. Sup.* XLVII, 1937, p. 57 and Pl. IV, Figs. A, C & D.

NO RESEMBLANCES OF THE MARKS TO THE INDUS SCRIPT

In the case of the Five-Mark coins, certain of the Obverse Marks bear a striking resemblance to certain signs of the Indus Script on the seals which have been found at Mohenjo-dāro and Harppa. In the case of the Bhiṛ-Mound Coins there are thirty-one Obverse Marks which bear a direct resemblance to signs in that script. In the present coins, however, and also in the other coins of the present type which have been illustrated by Mr. Durga Prasad [12] there are no marks which resemble signs of the Indus Script.

THE REVERSE MARKS.

The Reverse Marks on the present coins are of the usual type on the older class of punch-marked coins. They are much smaller than the obverse marks and are less deeply punched, having been punched on the coins when in circulation, while the Obverse Marks appear to have been punched on to the metal when heated. They are the marks of shroffs, bankers and moneyers, through whose hands the coins passed in the course of circulation. They are of great diversity, and represent a great variety of objects. They are shown on Plates II, III and IV.

The marks have been drawn direct from the coins. Those shown in solid black, such as Nos. 13a to 17f, are stamped into the coins (intaglio), as distinct from the others, which, like the obverse marks are in relief on a sunk incuse.

There are 194 different types of marks, which with their distinct varieties amount to 417 distinct marks, and there are probably others amongst those which are too indistinct to be deciphered. This great number can only be accounted for by the coins having circulated over a very extensive area, and, in the case of many, over a long period. The great majority of the marks occur on only a single coin, and others on only two or three coins. Marks 182 to 194 occur only on the older classes of the coins.

Besides designs and ornamental figures, they comprise of Human Figures (No. 97); Animals (91—93); Fish (94, 95); Scorpions (43 and 68); Centipedes (44, 45); *Liṅgams* (72, 73); *Yonis* (76); and, of weapons; spear-heads (77); arrow-head (78), bow-and-arrow (79) and Elephant-Goad, *Aṅkuśa* (82). Some of the marks resemble, and may be Brāhmī letters, as K, क, (69); G. ग (99a, b, c and 124); Ṭ, ट (38a-f); DH, ध (106a, b); M म (103 a, b, c) and Y, य (104a, b).

I have prepared a Table showing the coins on which each of the Reverse Marks occur, but as it is necessarily voluminous, I have

12 *Num. Sup.* XLV, 1935, Pl. I, II, III, VI and XXXI.

not included it in this paper. The following general conclusions arise from it.

The Taurine is the most common mark and occurs on all the classes of the coins ; the most common varieties are 1 a ; and 1 b, on a great number of the coins, followed by 1 f, which occurs on 33 coins which include 4 coins of the older classes. Varieties, 1d, k, n, q, and t also occur on the older coins.

The prevalence of the Taurine Mark is also shown by the fact that different varieties of the mark occur on the same coin. Thus, Marks, 1a, 1b and 1f, occur on Coin No. 369, and Marks 1b, 1h, and 1l occur on coin No. 643, and more than one variety on several coins.

Even where the Reverse Mark is of the same variety, it is often of several different punches, which would show that the same mark was adopted by more than one person. The following marks, for example, are of different dies.

Mark 1a occurs twice on coins Nos. 519, 618, 647 and 696 ; Mark 1 b twice on coins 138, 722 and 729 ; Mark 1 d on coins 437 and 438 ; Mark 1 e, twice on coin 548 ; Mark 1f twice on coins 729 and 736 ; Mark 1 k on coins 600 and 601 ; Mark 7 e twice on coin 183 ; Mark 9 a twice on coin 1003 (Pl. VII, 15 ; Mark 11 b) twice on coin 518 ; and Mark IIe on coins 483 and 484.

Mark 192 occurs three times on coin 999 (Pl. VII, 11).

Twelve coins of Class III a, Nos. 833 to 844, which have only one mark on the reverse have all the same mark No. 29 c, showing that they all circulated in one neighbourhood and passed through the same hand.

Mr. Durga Prasad [13] has illustrated the reverse marks on 12 coins of similar type in the Lucknow Museum, and 5 coins obtained from Lucknow and 25 coins obtained from Mathura. Almost all those marks correspond with marks on the present coins, which shows that they have circulated in the same localities, and is a further confirmation that they belong to the same class of coins, of the same area.

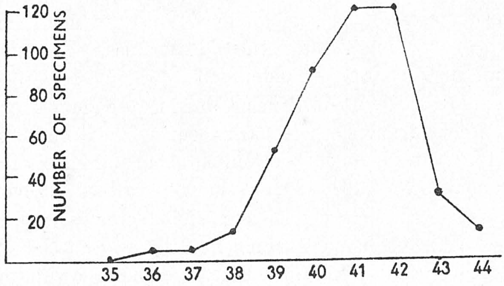
THE WEIGHT OF THE COINS.

The average weight of the coins is between 41 and 42 grains. I have separately weighed 436 of the coins, and their weights in grains are as follows :

Weight	35	36	37	38	39	40	41	42	43	44
No. of specimens.	2	3	3	7	55	89	120	120	31	6

13 *Num. Sup.* XLV, Pl. I, II, III and XXXI.

Showing the above result by co-ordinates, the weights as abscissæ, and the number of specimens as ordinates, we get the following diagram[14], which shows an actual standard of 42 grains.



Weight in Grains.

Mr. Durga Prasad[15] describes thirteen other coins of the Paila class, which are in the Lucknow Museum. Like the Paila coins, they are of the old large-thin type, and their weights vary from 40 to 43.5 grains, their average being 42 grains. Their provenance is not known, but is within the United Provinces. He also obtained twenty similar coins from Lucknow, and twenty-five at Mathura, which, together with the Paila coins, make a total of 1,072 coins of this class. Although twenty-five coins were obtained at Mathura, which is in the country of the Śaurasenas, their provenance is not known, and the fact that 1,014 of these coins were found at Paila in the District of Kheri, which is north of Lucknow, on the borders of Nepal, and others were obtained at Lucknow, points to these being the coins of the ancient kingdom of Kosála (corresponding to the modern Oudh), which was ultimately conquered and incorporated in the Mauryan Empire. This was far outside the area of early Persian influence, and there appears to be no reason to attribute their weight to a Persian standard.

Mr. Durga Prasad considers them to be of an old Indian standard of 24 Rattis. He writes (pp. 10-11) : 'Colebrooke in his article on *Indian Weights and Measures*, published in the *Transactions* of the Asiatic Society of Bengal in 1801, page 95, has said that Gopāla Bhaṭṭa, an early author, mentions that from the ancient astronomical books it is found that a Dharaṇa was of 24 Raktikās, and he has given a table of weight as follows :—

"2 Yavas (barleys) = 1 Guñjā. 3 Guñjās = 1 Balla.

14 "Punch-marked Silver Coins: Their Standard of Weight, Age, and Minting" by E. H. C. Walsh in *J.R.A.S*, 1937, pp. 293—304, pp. 301—2.

15 *Num. Sup.* XLV, 1935, p. 9 and Pl. I, II, III and XXXI.

8 Ballas = 1 Dharaṇa. As 2 barleys are equal to 1 Guñjā or Raktikā, 1 Dharaṇa contains 24 Raktikās or Rattis. It is clear from this that either at some period or locality silver coins of 24 Raktikās standard weight were current. It may be that at some period before Manu the Dharaṇas were of 24 Raktikās, though in his time they were of 32 Rattis." ' "

The weights given in the above Table are the average weights. Thus 36 grains represent coins from 35.51 to 36.50 grains, and similarly 42 grains represent coins from 41.51 to 42.50 grains, and similarly for the other figures. It will be noticed that there are only 31 coins of 43 grains (42.51—43.50), (in Classes I to V); and only 6 coins of 44 grains (43.51—44.50), (in Classes I to III). Of the older coins, Classes IX to XIII, only two (42.25 grs.) are over 42 grains. The standard of 24 Rattis, at Cunningham's weight of 1.83 grains to the Ratti, comes to 43.92, or 44 grains, which is much nearer to the actual weight of the coins, than Manu's 32 Ratti standard is, in the case of the Five-Mark coins.

The widely different provenance of punch-marked coins bearing the same group of Obverse Marks, and therefore of the same coinage, shows the very wide circulation of the punch-marked coins throughout India. But the fact that hitherto no Four-Mark coins have been found in other areas than that of the old kingdom of Kośala would appear to show that they did not circulate outside that area. This may well be due to their being of a different standard of value.

Mr. Durga Prasad [16] describes 10 small coins "obtained from Lucknow," of the average weight of 25.2 grains, as Half-Paṇas of the 32 Ratti standard. He illustrates 4 of these (Pl. VIII). They bear only one bold mark on the obverse, and from 2 to 11 marks on the reverse. The Obverse Mark on one of them (No. 3) is the Serpentines (Mark 1), and on two others is a mark which occurs together with Serpentines on other Kośala-Type coins. As 32 Rattis is the invariable standard of the Five-Mark coins, it would appear that those coins may be coins of Kośala subsequent to its conquest by the Kingdom of Magadha, which had the 32 Ratti standard.

16 *Num. Sup.* XLV, 1935, p. 13 and Pl. VIII.

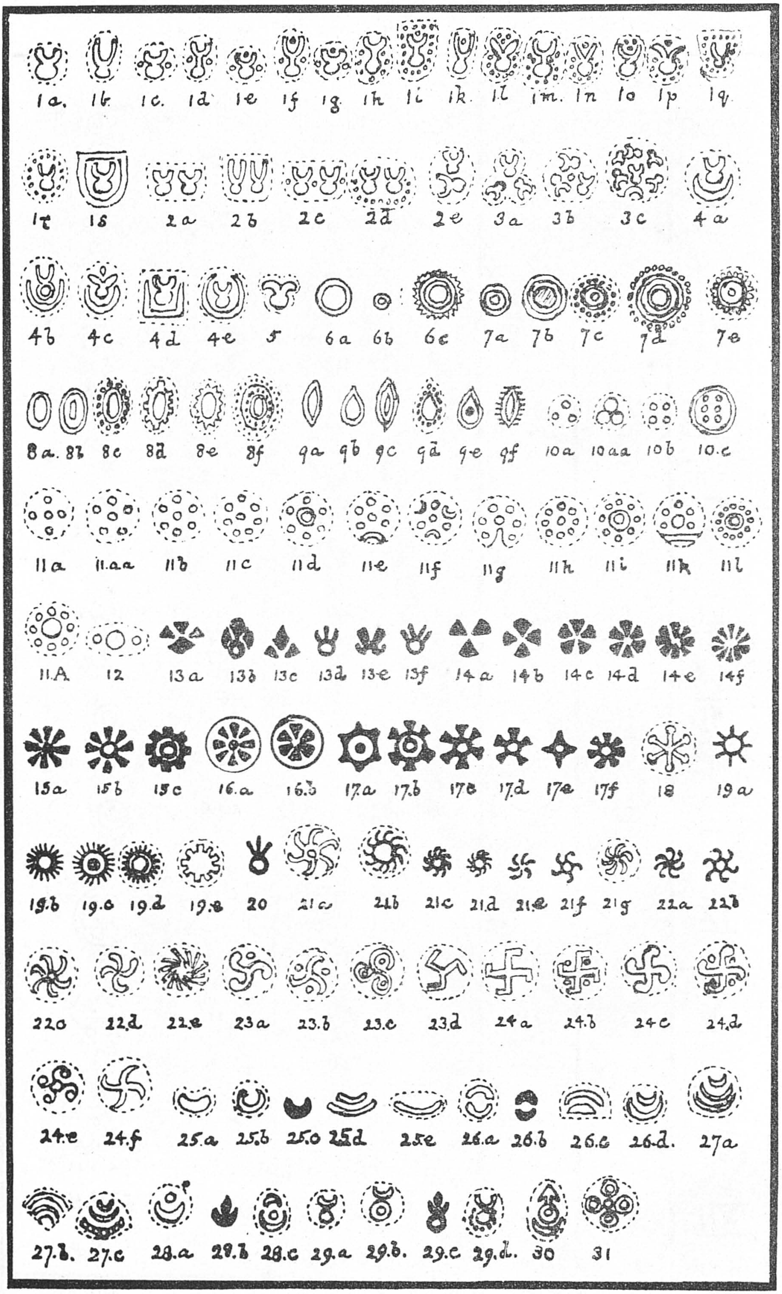
DESCRIPTION OF THE PLATES OF THE COINS.

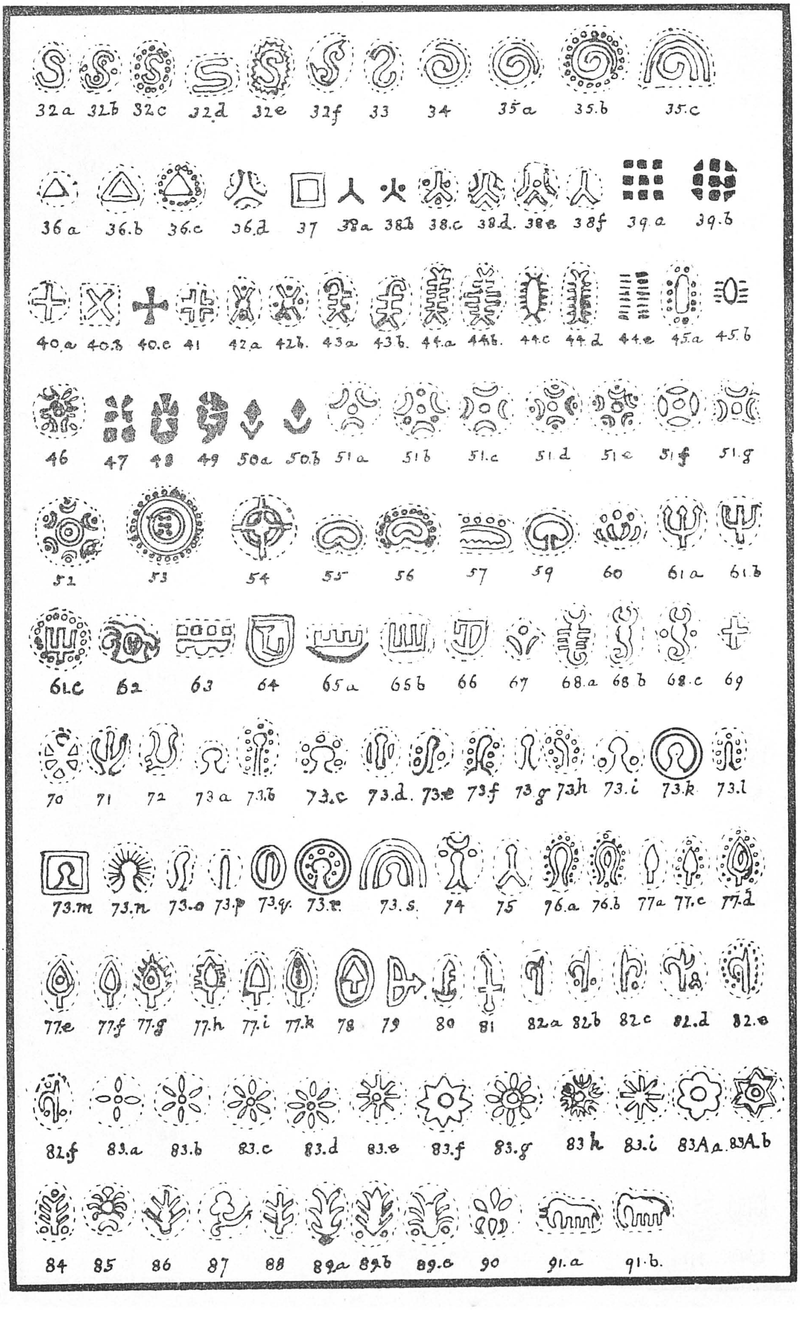
N.B. Throughout this paper, Weights are given in Grains and Sizes in Inches.

PLATE V.

No. in Pl.	Coin No.	Wt.	Size	Class	Remarks.
1	1	38·5	·72×·60	I a	Tusked Dumpy Elephant.
2	7	40·0	·76×·50	I a	Lanky Tuskless Elephant.
3	14	41·75	·75×·55	I a	Do. Do.
4	18	39·5	·76×·56	I a	Blank Reverse, shows raised excrescences.
5	161	39·5	·70×·55	I a	Lanky Tuskless Elephant.
6	212	44·0	·73×·60	I a	Do. of a different punch.
7	222	39·5	·65×·65	I a	Do. Do.
8	282	41·25	·60×·55	I b	Dumpy Tuskless Elephant. Pentagram with Dots clear.
9	285	40·5	·65×·55	I b	Elephant indistinct.
10	286	39·75	·65×·55	I b	Lanky Tusked Elephant.
11	287	40·5	·65×·60	I b	Elephant incomplete. Pentagram and Shield clear.
12	351	38·0	·62×·56	I b	*Reverse.* Marks. 35a and 51c.
13	363	42·0	·68×·58	I b	Clear Pentagram Plain.
14	366	41·3	·62×·60	I b	Do. Do.
15	429	41·0	·70×·68	I b	The Pentagram is stamped twice on this coin.
16	473	41·5	·72×·65	II a	The legs only of Lanky Type Elephant appear.
17	497	41·5	·75×·58	II a	Tusked Elephant.
18	501	43·0	·80×·50	II a	Do.
19	516	40·5	·83×·48	II a	The Elephant is indistinct.
20	518	41·5	·75×·53	II a	*Reverse.* Marks 11b, 11b (large) 29a, 83A. b.
21	530	40·5	·76×·56	II a	The Shield is stamped twice.
22	538	41·5	·80×·55	II a	The Elephant is indistinct.
23	548	39·0	·75×·62	II a	*Reverse.* Marks 1a, 1e, 1m, 1n, and four other indistinct marks.
24	567	40·0	·65×·65	II b	*Reverse.* Clear Marks 1a, 1f, 24a, 73n, 142a.
25	583	38·0	·60×·56	II b	Mark 5 clear.
26	584	41·5	·66×·66	II b	Marks 1 and 5 clear. The latter of a different punch.
27	589	41·0	·82×·65	II b	Tusked Elephant. Clear marks of a different punch.

CLASS	Number of COINS	Serial No. of the Coins	OBVERSE MARKS			
I.	470	1–465, 224.A, 318 A, 318 B, 318 C, 433A.	1	2 a	3.a 3.b	4
II.	282	466-744 491·A, 501A, 571A.	"	"	"	5
III.	208	745-951 941 A	"	"	"	6
IV.	19	952-970	"	"	"	7
V.	11	971-981	"	"	"	8
VI.	4	982-985.	"	"	7	8
VII.	1	986	"	"	9	8
VIII.	2	987-988.	"	"	10	8
IX.	4	989-992	"	2.b	11	12
X.	1	993	"	"	"	Pr. 13.
XI.	8	994-1001	"	"	"	13.(Var.)
XII.	2	1002-1003	"	"	"	Indistinct 13.(Var.)
XIII	1	1004	"	"	"	13 (Var.)[?]


1a. 1b. 1c. 1d. 1e 1f 1g. 1h 1i 1k. 1l 1m. 1n 1o 1p 1q.
1r 1s 2a 2b 2c 2d 2e 3a 3b 3c 4a
4b 4c 4d 4e 5 6a 6b 6c 7a 7b 7c 7d 7e
8a. 8b 8c 8d 8e 8f 9a 9b 9c 9d 9e 9f 10a 10aa 10b 10.c
11a 11.aa 11b 11c 11d 11e 11f 11g 11h 11i 11k 11l
11.A 12 13a 13b 13c 13d 13e 13f 14a 14b 14c 14d 14e 14f
15a 15b 15c 16.a 16.b 17.a 17.b 17c 17.d 17e 17f 18 19a
19.b 19.c 19.d 19.e 20 21a 21b 21c 21d 21.e 21f 21g 22a 22b
22c 22.d 22.e 23a 23.b 23.c 23.d 24a 24.b 24c 24.d
24.e 24.f 25.a 25.b 25.c 25d 25e 26.a 26.b 26.c 26.d. 27a
27.b. 27.c 28.a 28.b 28.c 29.a 29.b. 29.c 29.d. 30 31


32a 32b 32c 32d 32e 32f 33 34 35a 35.b 35.c
36a 36.b 36.c 36.d 37 38a 38b 38.c 38d. 38e 38f 39.a 39.b
40.a 40.b 40.c 41 42a 42b. 43a 43b. 44.a 44b. 44.c 44d 44.e 45.a 45.b
46 47 48 49 50a 50.b 51a 51b 51.c 51.d 51.e 51.f 51.g
52 53 54 55 56 57 59 60 61a 61.b
61.c 62 63 64 65a 65b 66 67 68.a 68b 68.c 69
70 71 72 73a 73.b 73.c 73.d. 73.e 73f 73.g 73h 73.i 73.k 73.l
73.m 73.n 73.o 73.p 73.q. 73.r. 73.s. 74 75 76.a 76.b 77a 77.c 77.d
77.e 77.f 77.g 77.h 77.i 77.k 78 79 80 81 82a 82b 82c 82.d 82.e
82.f 83.a 83.b 83.c 83.d 83.e 83.f 83.g 83h 83.i 83A.a 83A.b
84 85 86 87 88 89a 89b 89.c 90 91.a 91.b.

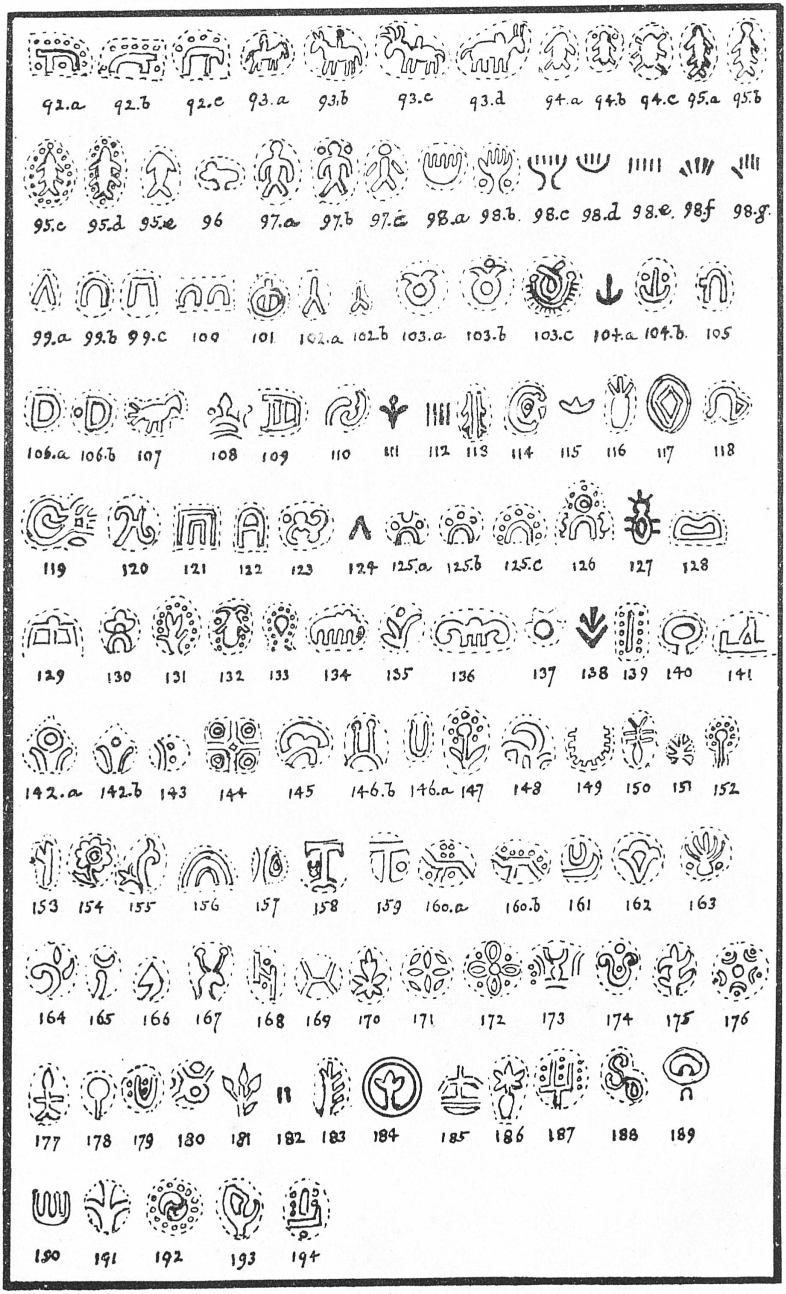

92.a 92.b 92.c 93.a 93.b 93.c 93.d 94.a 94.b 94.c 95.a 95.b
95.c 95.d 95.e 96 97.a 97.b 97.c 98.a 98.b 98.c 98.d 98.e 98.f 98.g
99.a 99.b 99.c 100 101 102.a 102.b 103.a 103.b 103.c 104.a 104.b 105
106.a 106.b 107 108 109 110 111 112 113 114 115 116 117 118
119 120 121 122 123 124 125.a 125.b 125.c 126 127 128
129 130 131 132 133 134 135 136 137 138 139 140 141
142.a 142.b 143 144 145 146.b 146.a 147 148 149 150 151 152
153 154 155 156 157 158 159 160.a 160.b 161 162 163
164 165 166 167 168 169 170 171 172 173 174 175 176
177 178 179 180 181 182 183 184 185 186 187 188 189
190 191 192 193 194

PLATE V. (*continued.*)

No. in Pl.	Coin No.	Wt.	Size	Class	Remarks.
28	605	41·0	·66×·60	II b	Tusked Elephant. Clear mark 1.
29	606	42·0	·80×·50	II b	Tusked Large Elephant.
30	637	39·5	·80×·60	II b	*Reverse.* Clear marks 11b, 152, 153, 154.
31	641	42·0	·85×·66	II b	Lanky Tusked Elephant.
32	642	38·5	·80×·60	II b	Mark 1 is stamped over the Elephant, and then the Shield (Mark 2a) is stamped over Mark 1. There are two Shields stamped on this coin.
33	668	42·0	·80×·75	II b	*Reverse.* Marks 1q, 15b, 34a, 77h and four other indistinct Marks.
34	670	38·5	·75×·75	II b	Clear Lanky Tusked Elephant.

PLATE VI.

1	721	42·0	·80×·66	II c	Clear Mark 5.
2	739	40·0	·65×·65	II c	*Reverse* Marks, 1h, 1l, 7a, 11e, 24a.
3	816	39·5	·75×·50	III a	Lanky Tuskless Elephant. Only the hinder part of Mark 6 is visible.
4	825	42·0	·65×·50	III a	The Hare (Mark 6) is clear.
5	870	41·0	·66×·63	III a	Clear Elephant and Hare.
6	951	42·5	·65×·58	III a	Only the legs of the Hare show at the bottom right corner.
7	909	41·25	·80×·46	III b	Unusually large Elephant.
8	912	40·5	·70×·50	III b	The Tuskless Dumpy Elephant is stamped twice on this coin, one overstamped by Mark 6.
9	941A	40·0	·66×·53	III c	Clear Shield (2a). The head only of the Hare on the right bottom edge of the coin.
10	952	43·0	·60×·54	IV b	Large Tusked Elephant. Only the lower part of the Bull (Mark 7) shows on the top right side of the coin.
11	955	41·0	·78×·62	IV b	Lanky Type Elephant, and Lanky Bull.
12	958	41·5	·60×·60	IV b	Thick Dumpy Bull.

PLATE VI. (*continued.*)

No. in Pl.	Coin No.	Wt.	Size	Class	Remarks.
13	959	40·0	·58×·55	IV b	Thick Dumpy Bull, which is of the same punch as on the preceding coin.
14	970	42·0	·70×·55	IV b	Thick Dumpy Bull, but of a different punch.
15	973	38·0	·78×·70	V b	This coin is interesting as it bears Mark 2a (Taurine in a Shield) and also Mark 2b (Large Taurene without Shield) which occurs on the Older Classes IX to XIII. It may possibly be that it was an older coin, of which the marks are worn off, which was re-struck.
16	974	40·25	·80×·65	V b	Mark 8 only partly shows on the left side of the coin. Lanky Type Elephant.
17	975	40·5	·75×·58	V b	Large Tusked Elephant. Clear Marks 1 and 8.
18	977	41·5	1·8 ×·80	V b	The Elephants on this and the preceding two coins are all of the Lanky Type, but are all different.
19	978	39·5	·90×·80	V b	Lanky Elephant. Mark 8 has a dot in the centre of the circle.
20	979	41·0	·83×·70	V b and IX	**Double Obverse Coin.** The later obverse of Class V has been restruck on the Reverse of an older coin of Class IX, the worn obverse of which is the "Reverse" of the later coin.
21	982	41·25	·80×·68	VI	*Reverse.* Marks 1f, 51b, 36d, 163
22	983	40·75	·80×·75	VI and IX	**Double Obverse Coin.** The Obverse of Class VI has been restruck on the Reverse of an Older Coin of Class IX, the Obverse of which is on the "Reverse" of the later coin. The Hexagon and the Wheel

PLATE VI (*continued.*)

No. in Pl.	Coin No.	Wt.	Size	Class	Remarks.
					of the older coin are clear, though the face has been overstamped by several reverse marks during its later currency as Class VI. The Bull is on the bottom right hand corner of the Class VI Obverse.
23	984	42·25	·93×·82	VI and IX	**Double Obverse Coin** as the preceding. The Lanky Bull and the other Marks are clear on the later Class VI Obverse.
24	985	40·75	·90×·66	VI and IX	**Double Obverse Coin** as the preceding. Clear Marks on the Later Obverse of Class VI. Lanky Bull, but of a different punch.
25	986	41·0	·75×·70	VII and IX	**Double Obverse Coin**. An older coin of Class IX restruck later as Class VII. Clear marks Palm Tree and Shield on the Class VII Obverse. The Hexagon can be faintly traced on the older Obverse which has been overstamped by reverse marks during its later circulation as a coin of Class VII.
26	987	42·0	·80×·62	VIII	The left hand part of Mark 8. The Tree is clear.
27	988	40·25	·72×·63	VIII	The Tree is clear, of a different type from the preceding coin.

PLATE VII.

No. in Pl.	Coin No.	Wt.	Size	Class	Remarks.
1	989	42·25	·74×·74	IX	The Wheel (Mark 12) is clear. The horns of the Taurine (Mark 2b) are visible on the bottom right hand corner.
2	992	41·5	·80×·70	IX	Mark 13 (Circle with Curved Rays) is on the left of the coin.
3	990	40·5	·90×·50	IX	Worn coin. The Wheel (Mark 12) is clear.

PLATE VII (*continued.*)

No. in Pl.	Coin No.	Wt.	Size	Class	Remarks.
4	991	38·5	·85×·58	IX	The Wheel is clear, the Hexagon (Mark 11) is above it, Mark 1 is on the right hand edge, only part of the Taurine (Mark 2b) shows at the top of the coin.
5	993	42·0	·90×·75	X	Mark 13 (Circle with Branched Rays) is clear at the left hand top of the coin. *Reverse.* Marks 1d, 4a, 8c, 11Ab, 56b.
6	994	42·0	·76×·62	XI	**Double Obverse Coin.** Note the large size of Mark 1 on the older classes of the coins. Mark 13 is at the bottom left side of the coin. There is a much worn Hexagon on the reverse, which has been over-stamped by the Reverse Marks. This shows that the Reverse was previously the Obverse of one of the Classes IX to XIII which bear that Mark, probably Class IX. *Reverse.* Marks 1b, 83l, 93c.
7	995	42·5	·78×·63	XI	A large-sized variety of Mark 13 along the top of the coin. *Reverse.* Marks 4e (variety), 7a.
8	996	40·0	·92×·60	XI	Mark 13 is on the top left corner. *Reverse.* Marks 1f, 11Ab, 29a, 77d, 186.
9	997	42·25	·80×·65	XI	Mark 13 is at the bottom of the coin. *Reverse.* Marks 1t, 11k, 14e, 15a, 125c, 185, and two other indistinct marks.
10	998	41·25	·90×·52	XI	*Reverse.* Marks 1f, 1q, 16a, 83d, 83h, 83l, and three other confused marks.
11	999	41·5	·76×·62	XI	*Obverse* very much worn. A very old coin.

PLATE VII (*continued*)

No. in Pl.	Coin No.	Wgt.	Size	Class	Remarks.
					Reverse 11Ab, 19c (variety), 192 (Three times).
12	1000	41·25	·90×·62	XI	*Obverse* much worn. A very old coin. Mark 2b (Large Taurine not in Shield) is on the left top corner. Mark 13 on left centre. *Reverse.* Marks 7b, 10aa, 64 and twelve other Marks too confused to identify.
13	1001	42·0	·58×·70	XI	*Reverse.* Marks 1q, 1t, 2b, 92c and three other indistinct marks.
14	1002	41·0	·83×·75	XII	Note the larger size of Mark 1 (16 *mm* in diameter) on these older coins. Much worn. A very old coin. *Reverse.* Marks 1f, 3b, 19c, 32f and fifteen other marks, which are overstamped and too confused to identify.
15	1003	41·5	·90×·70	XII	Much worn. A very old coin. Mark 13 at the top right hand much worn, only part being visible. *Reverse.* Marks 1n, 9a (Twice, of different punches), 187, and at least seven other confused marks.
16	1004	30·0	·75×·62	XIII	A defective coin, part broken off. Mark 13 (variety) is at the lower right hand corner. The Taurine does not appear. *Reverse.* Marks 55, 73s and another indistinct one.
17	812	41·5	·72×·48	IIIa	*Reverse.* Blank—Showing Raised Excrescences.
18	817	40·0	·70×·53	IIIa	*Reverse.* Do.
19	911	40·5	·70×·50	IIIb	*Reverse.* Do.
20	969	41·5	·82×·38	IVc	*Reverse.* Do.

TABLE A.

THE NUMBER OF REVERSE MARKS ON EACH CLASS OF THE COINS.

Number of Reverse Marks.		Plain	1	2	3	4	5	6	7	8	9	10 or more	Total Coins	
Class.														
Ia	Square	71	66	30	13	15	..	1	..	..	..	..	201	235
	Round	10	10	5	5	3	..	..	..	..	..	..	34	
b	Square	50	37	33	31	10	10	3				..	174	222
	Round	11	10	7	10	5	4	..	1			..	48	
c	Square	4	2	2	2	..	..	..	..	..	..	..	10	12
	Round	..	1	1	..	..	..	..	..	..	..	..	2	
	Total	146	126	78	61	33	14	4	1			..	469	
IIa	Square	11	16	11	11	15	9	9	2	3	1	..	88	109
	Round	4	2	5	3	1	4	1	1	..	..	..	21	
b	Square	14	12	14	13	12	14	14	2	6	..	..	101	127
	Round	5	4	2	3	4	2	2	4	..	..	..	26	
c	Square	4	8	5	5	7	2	4	3	..	1	..	39	46
	Round	..	..	..	..	1	4	1	..	1	..	..	7	
	Total	38	42	37	35	40	35	31	12	10	2	..	282	
IIIa	Square	77	31	6	..	..	..	..	..	..	..	..	114	130
	Round	11	3	2	..	..	..	..	..	..	..	..	16	

TABLE A—*continued.*

Number of Reverse Marks.	Plain	1	2	3	4	5	6	7	8	9	10 or more	Total Coins.	
Class.													
IIIb Square	37	4	2	..	..	..	..	..	..	..	..	43	54
IIIb Round	9	2	..	..	..	..	..	..	..	..	..	11	
c Square	13	3	..	1	..	..	..	..	..	..	..	17	20
c Round	3	..	..	..	..	..	..	..	..	..	..	3	
Total	150	43	10	1	..	..	..	..	..	..	..		206
IVa Square	2	1	..	..	..	..	..	..	..	..	..	3	3
IVa Round	None	..	..	..	..	..	..	..	..	..	..	..	
b Square	3	3	1	1	4	1	..	..	..	..	..	13	17
b Round	2	1	..	1	..	..	..	..	..	..	..	4	
c Square	1	..	..	..	..	..	1	..	..	..	..	2	2
c Round	None	..	..	..	..	..	..	..	..	..	..	..	
Total	8	5	1	2	4	1	1	..	..	..	..		22
Va. No Coins	..	..	..	..	..	..	..	..	..	..	..		
Vb Square	..	..	2	..	1	2	..	..	1	..	2		8
Vb Round	None		..	..	..	..	..	..	..	..	..		
Total V and IX (Double Obverse coin)	..	..	..	..	..	..	..	..	..	..	..		1
													9

TABLE A—*continued.*

Number of Reverse Marks.	Plain	1	2	3	4	5	6	7	8	9	10 or more	Total Coins
Class.												
Ia to Va Round	1	..	..	..	..	..	..	..	..	..	..	1
IIb to Vb Square	1	..	..	..	..	..	..	..	..	..	..	1
VI Square	..	..	..	..	4	..	..	..	..	..	..	4
VI Round	None	..	..	..	..	..	..	..	..	..	..	
VI and IX (Double Obverse coin)	..	..	..	..	..	..	..	..	..	..	..	3
Total	..	..	..	..	..	..	..	..	..	..	..	7
VII and IX (Round and Double Obverse coin)	..	..	..	..	..	5	..	..	..	..	..	5
VIII Square ..	..	..	..	2	..	..	..	..	..	..	..	2
IX Square	1	..	..	2	..	..	..	..	..	..	..	3
IX Round	..	..	1	..	..	..	..	..	..	..	..	1
IX and Vb .. (Double Obverse coin, Square)	..	..	..	..	..	..	..	..	..	..	..	2
IX and VI Square ..	..	..	..	..	..	..	..	..	..	..	..	4
IX and VII Round ..	..	..	..	..	..	..	..	..	..	..	..	1
Total	..	..	..	..	..	..	..	..	..	..	..	11
X Round ..	..	..	..	..	..	1	..	..	..	..	..	1

TABLE A—*continued.*

Number of Reverse Marks.	Plain	1	2	3	4	5	6	7	8	9	10 or more	Total Coins
Class.												
XI Square	..	..	..	..	..	1	1	..	1	1	2 (12 & 15)	6
XI Round	..	..	..	..	..	..	..	1	..	..	..	1
XI and IX to XII, (Double Obverse coin)		..	..	1	..	..	..	..	..	..		1
Total												8
XII Square	..	..	..	..	..	..	..	..	..	..	1 (19 Mks)	1
XII Round	..	..	..	..	..	..	..	..	..	..	1 (14 Mks.)	1
XIII Square	..	..	..	1	..	..	..	..	..	..	..	1

LIST OF THE PAILA COINS.

CLASS Ia.

OBVERSE MARKS.

No. Weight. Remarks

Mark No. 1. Serpentines round a Central Boss ; No. 2. Taurine in a Shield ; No. 3a Elephant facing to the right ; No. 4. Pentagram with and without Dots in the Angles.

PLAIN REVERSE.

1	38·5	Pl. V, 1.
2	40·5	
3	41·5	Pentagram with Dots.
4	38·0	*Elephant over Pentagram* with Dots.

CLASS 1a.

PLAIN REVERSE.

No.	Wt.	Remarks
5	40·5	Serpentine over Pentagram. *Elephant over Pentagram.*
6	35.0	Clear Pentagram over Elephant, Elephant over Serpentine.
7	40·0	Clear. Pl. V, 2.
8	37·5	Clear.
9	35·5	Clear.
10	40·0	Clear.
11	40·0	Clear.
12	41·0	Clear.
13	40·5	Clear.
14	41·75	Clear. Pl. V, 3.
15	40·5	Clear.
16	40·5	Clear.
17	41·5	Pentagram with Dots.
18	39·5	Note the Raised Excrescences. Pl. V, 4.
19	..	*Defective.* Obverse partly flaked.
20	42·5	
21	43·0	
22	43·0	
23	42·5	
24	43·0	
25	42·0	
26	42·0	
27	42·0	
28 to 71	..	(weights not given here).

ONE REVERSE MARK.

No.	Mark	
72	1f	
73	9b	
74	11c	
75	11A	
76	17a	
77	19c	
78	28a	
79	95v	
80	100	
81	183	Part of mark only is visible.
82	103a	

CLASS Ia.

ONE REVERSE MARK.

No.	Mark	Remarks
83	1d	
84	×	Indistinct.
85	1a	
86	1c	
87	1d	
88	1d	
89	1e	
90	1f	
91	4a	
92	5	Pentagram with Dots.
93	6b	
94	7c	
95	6c	
96	8d	
97	11d	
98	13b	
99	14b	Pentagram with Dots.
100	15a	
101	16a	
102	17a	
103	19a	Pentagram with Dots.
104	21a	
105	21c	
106	22c	
107	22b	
108	24e	
109	25a	Pentagram with Dots.
110	25a	
111	26b	Pentagram with Dots.
112	28a	
113	28b	
114	28c	
115	46	
116	51d	
117	67	
118	..	Raised Excrescence.
119	98c	
120	1a	
121	1a	
122	1c	

CLASS Ia.

ONE REVERSE MARK:

No.	Mark	Remarks
123	29c	
124	×	Clear Dumpy Elephant.
125	×	
126	×	
127	×	Incomplete.
128	×	Pentagram with Dots.
129 to 135	×	Pentagram Plain.
136	×	
137	7c	Pentagram with Dots.

TWO REVERSE MARKS.

138	*1b*	*1b*	Different Dies.
139	79	×	
140	1d (Var)	2b	
141	1i	×	
142	1e	×	
143	11a	109	
144	1a	×	
145	28a	32c	
146	1e	29c	
147	1b	1g	
148	17c	31	
149	51c	54	
150	80	×	
151	6a	104b	Pentagram with Dots.
152	97b	×	Pentagram with Dots.
153	29c	104a	
154	5A	×	
155	5A	9c	
156	10a	11h	
157	1f	4a	
158	25a	110	
159	14f	51c	
160	1e	7a	
161	1a(small)	×	The Elephant is Tuskless. Pl. V, 5.
162	×	×	

CLASS Ia.

TWO REVERSE MARKS.

No.	..Marks..		Remarks
163	111	111	(*Twice*). Different dies.
164	×	×	
165	×	×	
166	1h	×	
167	21d	×	

THREE REVERSE MARKS.

168	1a	32c	77d	
169	7c	11e	29d	
170	7a	×	×	
171	1b	21e	×	
172	14c	89a	×	
173	1a(small)	×	×	
174	1d	19b	×	
175	1e	38b	×	
176	2b(small)	21e	77e	
177	3b	43a	30	Elephant over Pentagram.
178	25a	32b	×	
179	29a	81	×	
180	1a	1k	7a	

FOUR REVERSE MARKS.

181	2b	14d	6b	×	Pentagram with Dots.
182	1a	1b	14f	×	Do.
183	*7e*	*7e(diff.)*	19b	×	
184	1f	11b	25c	15a	1f is only 3 *mm*.
185	38e	89a	×	×	
186	1a(large)	6b	38b	77d	
187	29a	83b	×	×	
188	7a	14e	18	×	Pentagram with Dots.
189	1c	4b	24a	×	
190	1b	1h	112	×	
191	1b	21a	113	×	
192	1a	1f	1k	11b	
193	11b	116	×	×	
194	1a	×	×	×	
195	1a	×	×	×	

FIVE REVERSE MARKS (None)

CLASS Ia.

SIX REVERSE MARKS.

No.	..........Marks..........					Remarks
196	1d(?)	21e	114	×	×	
197	Defective.		Reverse Flaked.			No Mark.
198	Do.		Do.			Do.
199	Do.		Do.			Do.
200	Do.		Do.			1 Reverse Mark=29c.
201	Do.		Coin Broken			1 Reverse Mark=×

CLASS Ia. ROUND

PLAIN REVERSE.

No.	Weight.	Size.	
202	42·2	·75×·60	Clear.
203	40·5	·74×·63	,,
204	39·0	·70×·60	,,
205	41·5	·65×·65	,,
206	42·5	·70×·65	,,
207	42·0	·70×·65	,,
208	38·5	·65×·62	,,
209	40·5	·70×·68	,,
210	37·5	·70×·70	,,
211	36·5	·80×·65	A thinner coin and worn.

ONE REVERSE MARK.

212	50b	Clear	Tuskless Elephant.	Pentagram with Dots.	Pl. V, 6.
213	26c	Do.	Do.	Do.	Do.
214	115				
215	1b				
216	1c				
217	13b				
218	35a				
219	78				
220	1a				
221	11g				

TWO REVERSE MARKS.

222	14d	×	Tuskless Elephant. Pl. V. 7.
223	14e	29a	
224	1f	51a	
225	3a	×	
226	×	×	

CLASS Ia ROUND

THREE REVERSE MARKS.

No.	....Marks....			Remarks
227	16b	38a	×	
228	1a	1f	9d	
229	7a	9d	×	
230	1a	6b	×	
231	73g	83d	×	

FOUR REVERSE MARKS.

232	11a	38a	×	×
233	16a	19c	×	×
234	24d	×	×	×

DEFECTIVE.

235 Reverse Flaked. No Mark.

CLASS Ib

OBVERSE MARKS.

The Obverse Marks are the same as Class Ia, but the Elephant (Mark 3b) faces to the left.

PLAIN REVERSE.

No.	Wt.	Remarks	
236	42·0	Pentagram Plain	
237	45·0	,,	
238	42·0	,,	
239	42·0	,,	
240	42·5	,,	
241 to 262	—	,,	
263 to 281	—	,,	
282	41·25	,,	Pl. V, 8.
283	—	,,	
284	—	Defective coin. The Serpentine is flaked off.	
284A	—	Pentagram with Dots.	

CLASS Ib

ONE REVERSE MARK.

No.	Mark	Remarks
285	×	Pentagram with Dots. Pl. V, 9.
286	1a	,, ,, Pl. V, 10.
287	11b (small)	,, ,, Pl. V, 11.
288	1b (var.)	,, ,,
289	1c	,, ,,
290	13a	,, ,,
291	7a	,, ,,
292	12	,, ,,
293	21a	,, ,,
294	28b	,, ,,
295	19c	,, ,,
296	×	,, ,,
297	×	,, ,,
298	11b (small)	The Serpentine is stamped over Pentagram with Dots.
299	1a	Pentagram with Dots.
300	1b (var.)	,, ,,
301	1e	Pentagram Plain
302	1h	Clear mark.
303	11a	
304	11b	
305	25b	
306	47	
307	77d	
308	95a	
309	×	
310	57	
311	7a	
312	1f	
313	77f	
314	×	*Note. Raised excrescences.*
315	1b	
316	×	
317	1b	
318	1b	
318A	1a	
318B	28b	
318C	143	

CLASS Ib

TWO REVERSE MARKS.

No.	..Marks..		Remarks
319	×	×	Pentagram with Dots
320	19b (small)	83c	,, ,, ,,
321	1e	40*a*	,, ,, ,,
322	6a	8a	,, ,, ,,
323	1b	11e	,, ,, ,,
324	1a (small)	×	,, ,, ,,
325	73c	102h	,, ,, ,,
326	19d	97b	,, ,, ,,
327	1f	7c	,, ,, ,,
328	1a	71	Pentagram Plain.
329	1a	67	
330	1c	1f	
331	1c	14b	
332	1i	40	
333	1i	×	
334	1i (small)	28a	
335	5A	51c	
336	7b	70	
337	7c	29c	
338	8f	11f	
339	11b	88a	
340	11b	×	
341	14e	38a	
342	15a (var.)	×	Incomplete.
343	29a	×	
344	17a	42a	
345	17c	72	
346	19a	1b	
347	36a	108	
348	51c	×	
349	14e (small)	17c	
350	×	×	
351	35a	51c	Note the raised excrescences on the Reverse. Pl. V, 12.

CLASS Ic

THREE REVERSE MARKS.

No.	....Marks....			Remarks
352	21a	×	×	Pentagram with Dots.
353	1e	11i	×	,, ,, ,,
354	19c	117	×	,, ,, ,,
355	15c	77g	×	,, ,, ,,
356	11b	×	×	,, ,, ,,
357	1k	118	×	,, ,, ,,
358	13c	×	×	,, ,, ,,
359	1b (small)	×	×	,, ,, ,,
360	29c	×	×	,, ,, ,,
361	1b	119	×	,, ,, ,,
362	29c	×	×	,, ,, ,,
363	77b	125b	× (Incuse.)	Pentagram Plain. Pl. V, 13.
364	11f	51c	×	
365	40a	98g	120	
366	1b	111b	51a	Pl. V, 14.
367	19b	121	122	
368	1b	14e	×	
369	9e	77d	123	
370	1f	×	×	
371	83d	73hh	73g	
372	6b	73k	83d	
373	1f	11e	25a	
374	11e	93b	×	
375	1f	114	×	
376	11b	16b	×	
377	21c	×	×	
378	17c	95d	×	
379	1d	51c	×	
380	1f (small)	5A	28b	
381	1i (var.)	1k	125b	
382	1b	1i	83b	

CLASS Ib

FOUR REVERSE MARKS.

No.	....Marks....				Remarks
383	1e (small)	14c	19b	38a	Pentagram with Dots.
384	1b (small)	1f (small)	10b	19b	,, ,, ,,
385	1b	29c	38b	×	,, ,, ,,
386	1b	1k	11d	×	,, ,, ,,
387	1h	1k	17d	×	,, ,, ,,
388	11e	39b	124	×	,, ,, ,,
389	51c	77d	126	×	,, ,, ,,
390	1b	×	×	×	Pentagram Plain.
391	1k	14e	731	×	
392	21c	51e	127	×	

FIVE REVERSE MARKS.

393	1b	11f	15b	×	×	Pentagram with Dots.
394	1i (var.)	33	51a	125b	×	,, ,, ,,
395	1a	1f	11b	124	×	,, ,, ,,
396	*1a*	*1b*	*1d* (small.)	77f	×	,, ,, ,,
397	1a	1b	19b	×	×	,, ,, ,,
398	1a	1f (Large)	11b	21a	32a	Pentagram Plain.
399	24f	×	×	×	×	Incomplete marks.
400	1a	7e	77b	×	×	
401	11	11 (twice)	91a (small)	×	×	
402	38b	119	125	188	×	

SIX REVERSE MARKS.

403	1b	19b	27a	8e	82c	×	
404	1a	29c	×	×	×	×	Pentagram with Dots.
405	84	14d	25e	125b	×	×	,,

DEFECTIVE.

406	NO MARKS.	Reverse flaked.

CLASS Ib ROUND

PLAIN REVERSE.

No.	Wt.	Remarks
407	41·0	Pentagram with Dots.
408	43·0	,, ,, ,,
409	42·5	,, ,, ,,
410	42·0	Pentagram Plain.
411	42·5	
412	39·5	
413	32·0	
414	42·5	
415	41·0	
416	40·5	
417	—	Defective coin; Flaked.

ONE REVERSE MARK.

No.	Mark	Remarks
418	102a	Pentagram with Dots.
419	16b	,, ,, ,,
420	29c	Pentagram Plain.
421	×	
422	×	
423	1a	
424	11b	
425	83c	
426	×	
427	×	

TWO REVERSE MARKS.

428	14f	94b	
429	2a	6a	*Pentagram is stamped twice on the coin.* Pl. V, 15.
430	129	×	Pentagram with Dots.
431	19b	51c	Pentagram Plain.
432	27b	29a	
433	77f	19e	
433*A*	32d	34a	

7146

CLASS Ib ROUND.

THREE REVERSE MARKS.

No.	....Marks....			Remarks
434	×	×	×	(Elephant Type 13). No Cast.
435	1a	1a (var.)	×	
436	1a	25a	×	
437	1d	11b	21e	
438	1d	16b	28b	
439	1a	38d	77b	Pentagram with Dots.
440	1e	1k	×	,, ,, ,,
441	9a	17b	105	,, ,, ,,
442	13b	23c	77f	,, ,, ,,
443	128	×	×	,, ,, ,,

FOUR REVERSE MARKS.

444	51c	×	×	×	
445	1a	35a	38a	×	
446	1a	8d	15b	98d	
447	11a	73c	×	×	Pentagram with Dots.
448	11e	93b	×	×	,, ,, ,,

FIVE REVERSE MARKS.

449	1f	15b	19a	21a	×	
450	1a	7e	21f	89b	×	
451	1b	15a	23d	125b	×	
452	14d	15b	19b	83f	×	Pentagram with Dots.

SEVEN REVERSE MARKS.

453	1f (large)	6a	14e	19e	21b	×	×	Pentagram with Dots.

CLASS Ic

OBVERSE MARKS.

The Obverse Marks are the same as Class Ia, or Class Ib, but the direction of the Elephant cannot be determined.

CLASS Ic

PLAIN REVERSE.

No.	Marks	Remarks
454		
455		Pentagram with Dots.
456		,, ,, ,,
457		,, ,, ,,

ONE REVERSE MARK.

458	1f	Pentagram with Dots.
459	×	

TWO REVERSE MARKS.

460	1a	29c
461	1k	11b

THREE REVERSE MARKS.

462	1b	11a	38a	Pentagram with Dots.
463	1e	22d	×	

CLASS Ic ROUND.

ONE REVERSE MARK;

464	×

TWO REVERSE MARKS

465	1d	83Aa	The Obverse is flaked off. Only Serpentine and Pentagram are visible. Coin defective.

CLASS IIa

OBVERSE MARKS.

No. 1. Serpentines round a central Boss; No. 2. Taurine in a Shield; No. 3a. Elephant facing to the right; No. 5 Circle [Sun] and Crescent, with two arrows pointing outwards between them;

CLASS IIa.

PLAIN REVERSE.

No.	Wt.	Remarks
466	42·5	
467	41·0	
468	41·5	
469	40·5	
470	42·5	
471	41·5	
472	42·0	
473	41·5	Pl. V, 16.
474	39·5	
475	41·5	
476	41·5	
476A	41·75	Clear coin. Elephant with two dots overstamped.

ONE REVERSE MARK.

No.	Wt.	Mark	Remarks
477	41·0	9b	Elephant with two dots. The die of the Elephant on this coin and the preceding one are different.
478	42·0	1b	
479	43·5	68b	
480	42·0	1f	
481	41·5	7e	
482	42·0	11b	
483	40·5	11e	Different Dies.
484	40·0	11e	Different Dies.
485	42·0	23b	
486	41·0	27a	
487	41·5	29a	
488	39·0	77d	
489	35·0	119 (Portion)	
490	42·5	130	
491	44·5	×	
491A	40·5	×	

TWO REVERSE MARKS.

492	41·0	11	×
493	39·0	83f	×
494	41·5	24b	28b

CLASS IIa

TWO REVERSE MARKS.

No.	Wt.	..Marks..		Remarks
495	42·0	24a	×	
496	40·5	1c	27a	
497	41·5	9b	×	Pl. V, 17.
498	41·5	1b	189	
499	41·5	1i	14d	
500	42·0	45a	83f	(var.)
501	43·0	×	×	Pl. V, 18.
501A	36·5	×	×	

THREE REVERSE MARKS.

502	1a	36b	41	
503	1a	16c	77a	
504	1b	11b	44c	
505	1f	11b	132	
506	1b	134	×	1b is clear.
507	14c	27a	×	
508	19b	133	×	
509	32c	×	×	
510	1f	51c	126	
511	77d	131	×	
512	77d	×	×	Incomplete Mark.

FOUR RFVERSE MARKS.

513	5A	*15b*	*15b* (Var.)	×	
514	15b	×	×	×	
515	25a	73a	82b	99c	
516	17e	83b (var.)	×	×	Pl. V, 19.
517	1a	1f	15a	×	Elephant with 3 dots above it. Serpentine stamped over the Elephant.
518	*11b*	*11b* (large)	29a	83Ab	Elephant with 3 dots over < > (Mark 5) and Shield over Mark 5. Reverse. Pl. V, 20.
519	*1a*	*1a* (diff.)	16a	81	

CLASS IIa

FOUR REVERSE MARKS.

No.	........Marks........				Remarks
520	1a (small)	×	×	×	
521	1a	1h	19b	×	
522	1h	22a	38f	37	
523	4b	15b	77a	89b	
524	15b	21b	×	×	
525	28b	77f	×	×	
526	73h	90	×	×	
527	7c (small)	45b	83d	136	

FIVE REVERSE MARKS.

No.	Marks					Remarks
528	7e	15b	29c	×	×	
529	1b	29b	29c	×	×	
530	7a	17d	16c	29e	×	Only the back of the Elephant shows over-stamping. The Shield is stamped twice. Wt. 40·5. Pl. V, 21.
531	24c	28b	38a	135	×	
532	2c	7c	11a	×	×	
533	1a *over* 11e		51c	73c	×	
534	6a	17a *over* 40a				
535	1a	1k	11b (small)	×	×	
536	1e	28b	13d	×	×	

SIX REVERSE MARKS.

No.	Marks						Remarks
537	1a	44c	137	99b	×	×	
538	14e	13c (Var.)	82d	95a	×	×	Pl. V, 22.
539	1m	2a	4c	27c	11b	×	
540	1a (small)	1f	73m	20	×	×	
541	1n	11aa	44d	×	×	×	
542	38b	×	×	×	×	×	
543	1a	1f	8a	11e	103a	95e	
544	21c	38a	51d	138	×	×	
545	5A	11c	28a	125b	×	×	

CLASS IIa

SEVEN REVERSE MARKS.

No.	Marks						
546	1l	1m	11A	16c	51a	×	×
547	1k	32f	190	×	×	×	×

EIGHT REVERSE MARKS.

548	1a	1e	1m	1n	×	×	×	×
							Reverse.	Pl. V, 23.
549	7a	16b	19d	*51c*	*51c* (diff.)	99d	×	×
550	1c	1f	9a	79	×	×	×	×

NINE REVERSE MARKS.

551	1f	11b (large)	×	×	×	×	×	×
							Marks confused.	

CLASS IIa ROUND.

PLAIN REVERSE.

552	Clear coin.	Weight 41·5
553	Clear coin.	Weight 43·5
554		Weight 41·5
555		Weight 39·0

ONE REVERSE MARK.

556	4a
557	×

TWO REVERSE MARKS.

558	1a	1c
559	1f	73c
560	7c	40a
561	139	140
562	91	×

THREE REVERSE MARKS.

563	1c	25a	×
564	1a	1h (var.)	9f
565	51c	×	×

CLASS IIa ROUND

FOUR REVERSE MARKS.

No.	........Marks........				Remarks
566	11b	141	35a	×	

FIVE REVERSE MARKS.

567	1a	1f	24a	73n	142a	Pl. V, 24.
568	1k	7c	11b	×	×	
569	1f (Large)	11b	16a (Minute).	×	×	1f is clear.
570	11b	15a	×	×	×	

SIX REVERSE MARKS.

No.	Wt.						
571	—	If	9g	11k	7a	51e	×

SEVEN REVERSE MARKS.

571A	—	1a	1a (var.)	1f	11b	9c	77a	×

CLASS IIb

OBVERSE MARKS.

The Obverse Marks are the same as Class IIa, except that the Elephant (Mark 3b) faces to the left.

PLAIN REVERSE.

572	43·5			
573-576	—			
577	42·0			
578	41·5			
579	40·5			
580	40·5			
581	40·5			
582	39·0			
583	38·0	<ŏ>	mark clear.	Pl. V, 25.
584	41·5		,,	Pl. V, 26.
585	42·5			

CLASS IIb

ONE REVERSE MARK.

No.	Wt.	Marks	Remarks
586	42·5	1e	
587	42·5	1f	
588	44·0	9h	
589	41·0	×	Pl. V, 27.
590	41·0	145	
591	37·0	1a	
592	39·5	×	Incomplete.
593	41·5	×	
594	42·0	1a	
595	42·0	×	
596	41·5	11b	
597	41·0	146b	

TWO REVERSE MARKS.

No.	Wt.	Marks		Remarks
598	42·0	1a	×	
599	42·0	1f	×	
600	41·5	1k	14f	The two 1k marks are from different dies.
601	41·0	1k	27a	
602	40·5	11b (large)	×	= Incomplete.
603	39·0	15b	144	(144 is clear)
604	42·0	15a	68a	(68a is clear)
605	41·0	8e	62	(62 is clear) Pl. V, 28.
606	42·0	1f	44a	Pl. V, 29.
607	40·5	29e	148	(29e is clear)
608	39·5	83f	×	Incomplete.
609	39·5	147	×	
610	42·0	77c	99a	For Mark 5, see No. 622.
611	41·0	31	×	(31 is clear).

THREE REVERSE MARKS.

No.	Wt.	Marks			Remarks
612	41·0	1a	1d	14g	
613	42·0	1bb	6a	66	Clear Reverse Marks.
614	41·0	1a	4a	83d	
615	41·5	1a	29a	32e	
616	41·0	59	146a	×	
617	40·5	149	×	×	

CLASS IIb

THREE REVERSE MARKS.

No.	Wt.	....Marks....			Remarks
618	41·0	*1a*	*1a* (*diff.*)	11b	
619	40	26c	73m	91b (diff.)	
620	42·5	11b	33	×	
621	41·5	1a	29a	77d	= Incomplete.
622	42·5	15a	×	×	
623	40·5	68a	×	×	
624	40·0	1e	27a	27a	*27a is punched twice.*

FOUR REVERSE MARKS.

No.	.......Marks.......					Remarks
625	–1f	36c	×	×		
626	—	32c	40b	×	×	
627	—	1a	9i	51f	107	
628	—	1h	43a	150	×	
629	1a	×	×	×		(Elephant Type 11). No cast.
630	11b	15a	15c	×		
631	14e	16a	11i	77d		
632	1e	19b	89a	×		
633	1a	9a	9d	137		
634	11f	51c	73k	×		
635	×	×	×	×		
636	1a	1b	25d	×		

FIVE REVERSE MARKS.

637	11b	152	153	154	×	Clear Reverse Marks. Pl. V, 30.
638	1a	1b	11b	21c	×	
639	*1a*	*1a* (*diff.*)	9a	×	×	
640	1a (small)	×	×	×	×	
641	1h	×	×	×	×	Pl. V, 31.
642	1a	155	156	×	×	*Note.* Serpentine is stamped over Elephant, and Shield over Serpentine. There are 2 *Shields*. Pl. V, 32.

CLASS IIb

FIVE REVERSE MARKS.

No.	....	....	Marks	....	....	Remarks
643	*1b*	*1h*	*1l*	20	22a	
644	1bb	15a	33	151 (minute)	×	
645	1f (*clear*)	11e	68c	1n	×	
646	1a	1h	7a	11e	142b	Clear Reverse Marks.
647	*1a*	*1a* (*diff.*)	1c (large)	26c	×	
648	28b	157	158	×	×	
649	4d	11e	29c	28d	159	
650	1f	2e	×	×	×	

SIX REVERSE MARKS.

No.							Remarks
651	1e	1k	13b	29a	×	×	
652	7a (Minute.)	11b	17a	97c	162	× (Inc.)	Clear Reverse Marks.
653	1i (var.)	1p	3c	7a (var.)	142b	161	
654	1a	1l (var.)	10d	×	×	×	
655	28a	43a	73c	51c	160a	×	Clear Reverse Marks.
656	11b	73c	×	×	×	×	
657	1b	65b	163	×	×	×	
658	43b	×	166	×	×	×	Overstamped and confused, but different from the Reverse Marks of Class I.
659	1a	29a	83d	36a	36b	×	
660	1b	11a	×	×	×	×	
661	1a	164	×	×	×	×	
662	11e	17a	165	×	×	×	
663	*97a*	11b	11Aa	73o	×	×	
664	1k	28a	43a	×	×	×	
665	1a	9a	11k	×	×	×	
666	29a	32a	*75*	142b	×	×	

CLASS IIb

EIGHT REVERSE MARKS.

No.	...	...	...	Marks	...	...	...	...
667	1a (sm. in centre).	16a	7a	×	×	×	×	×
	The remaining marks are overstamped and confused.							
668	1q	15b Pl. V, 33.	34a	77h	×	×	×	×
669	1f	*1k*	*1k*	1i	×	×	×	×
	The two 1k marks are from different dies ; 1i is small ; 6th mark is incomplete.							
670	1a	1l Pl. V, 34.	11l	89c	167	×	×	×
671	The marks are overstamped and confused.							
672	1a	1k	168	Confused marks.				

CLASS IIb ROUND

PLAIN REVERSE.

No.	Wt.
673	43·5
674	42·5
675	42·0
676	41·0
677	40·0

CLASS IIb

ONE REVERSE MARK.

678	41·0	1a
679	42·5	11e
680	40·5	44a
681	40·5	98i

TWO REVERSE MARKS.

682	40·5	*5A*	*5A* (*Small*). These are the *same die.*
683	42·0	1f	11b

THREE REVERSE MARKS.

684	40·5	1h	73b	13c
685	45·5	a	29e	169 (small)
686	41·5	11b	98l	170

CLASS IIb

FOUR REVERSE MARKS.

No.	Wt.	........Marks........			
687	40·5	1d (var.)	4a	×	×
688	39·5	43b	51c	×	×
689	38·5	1f	73b	×	×
690	42·5	4d (small)	16b	98h	171

FIVE REVERSE MARKS.

691	43·5	4b	95a	26d	160b	×
692	42·0	77a (small)	111	×	×	×

SIX REVERSE MARKS.

693	40·5	1e	13f	73c	77d	×	×
694	39·5	1h	7a	16a	21a	23b	×

SEVEN REVERSE MARKS.

695	40·5	1d	11b	29b	83d	77i	×	×
696	40·0	*1a**	*1a**	11b	29a	×	×	×
697	41·0	1e	11i	77c	73p	44a	×	×
698	41·0	1a	11b (small)	16b	98c	×	×	×

*Marks identical but dies different.

CLASS IIc

OBVERSE MARKS.

The Obverse Marks are the same as Class IIa, or Class IIb, but the direction of the Elephant cannot be determined.

PLAIN REVERSE.

No.	Wt.
699	43·0
700	42·0
701	41·5
702	41·0

CLASS IIc

ONE REVERSE MARK.

No.	Wt.	........Marks........	Remarks
703	40·5	1b	
704	42·0	1c	
705	41·0	1f	
706	42·5	9e	
707	41·0	9h	
708	41·0	29a	
709	42·0	103a	*Clear Reverse Mark.*
710	41·0	×	

TWO REVERSE MARKS.

711	42·5	1a	14d	
712	42·5	1a	×	
713	40·5	1a	11b	
714	42·5	8a	94c	
715	36·5	19e	21e	

THREE REVERSE MARKS.

716	41·0	1a	77d	172	
717	41·0	1a	*1n*	×	
718	41·0	1b	×	×	Elephant Indistinct, but is not Class VIII.
719	40·5	7b	11e	×	
720	41·5	81 (small)	×	×	

FOUR REVERSE MARKS.

721	41·0	2b	32a	83h	73q	Pl. VI, 1.
722	42·0	*1a*	*1a* (*smaller*)	44b	×	
723	42·0	1f	11b	×	×	
724	40·5	61b	174	×	×	
725	41·0	73r	174	×	×	
726	40·0	1f (Sm.)	11b (Sm.)	29c	98d	
727	42.0	1e	6b	83d	×	

CLASS IIc

FIVE REVERSE MARKS

No.		Marks					Remarks
728	—	11	*1s*	11b	11Aa	175	
729	—	*1a*	*1a* (*smaller*)	**1f*	**1f*		*Different dies.

SIX REVERSE MARKS.

730	—	7c (small)	11i	67b	×	×	×	
731	—	15b	19b	11e	176	177	×	
732	—	1b	51c	×	×	×	×	
733	—	6a	16a	22e	×	×	×	

SEVEN REVERSE MARKS.

734	×	×	×	×	×	×	×	All confused.
735	1a	1f	1n	35b	51c	×	×	Marks uncertain.
736	*1f*	*1f* (*diff. dies*)	7a	77e	×	×	×	

NINE REVERSE MARKS.

737	15b	9g	×	×	×	×	×	×	×

Confused Marks.

CLASS IIc ROUND.

FOUR REVERSE MARKS.

738	1h	39a	×	×	Defective Coin. Broken.

FIVE REVERSE MARKS.

739	1h	11	7a	11e	24a	Clear Reverse Marks. Pl. VI, 2.
740	1e	11k	21a	29a	×	
741	1f	11e	×	×	×	
742	6a	77k	×	×	×	

SIX REVERSE MARKS.

743	1a	42b	77b	98d	×	×

CLASS IIc ROUND

EIGHT REVERSE MARKS.

No.	..................Marks..................							
744	1a	1k	14b	125b	77c	×	×	×

CLASS IIIa

OBVERSE MARKS.

1. Three Serpentines round a Central Boss ;
2. Taurine in Shield; 3a Elephant facing to Right;
6. Sitting Hare.

PLAIN REVERSE.

No.	Wt.	
745	44·5	
746	43·0	
747	43·0	
748	43·0	
749 to 754	42·5	
755-760	42·0	
761-765	41·5	
766-770	41·5	
771-775	41·0	
776-779	41·0	
780-783	40·5	
784-787	40·5	
788-792	39·5	
793-797	39·0	
798	36·0	
799	42·0	
800	40·0	
801	40·0	
802	41·5	
803	42·0	
804	43·5	Raised Protuberances on the Reverse.
805	42·0	
806	41·5	
807	42·5	
808	41·0	
809	40·5	

CLASS IIIa

PLAIN REVERSE.

No.	Wt.	Remarks
810	41·0	
811	41·0	
812	41·5	Raised Protuberances on the Reverse. Pl. VII, 17 (Reverse).
813	41·0	Clear Mark 3. The Hare.
814	41·0	*All Four Obverse Marks are clear.*
815	43·0	*Serpentine over Hare.*
816	39·5	Pl. VI, 3.
817	40·0	Note the protuberances on the reverse. Pl. VII, 18 (Reverse).
818	40·6	Raised Protuberances on the reverse.
819	42·0	
820	40·5	

Coins Nos. 949-50 also belong to this class.

ONE REVERSE MARK.

821	..	1a	
822	..	1b	
823	..	1b	
824	..	1e	
825	42·0	14c	The Hare (Mark No. 6) is clear. Pl. VI, 4.
826	..	16b	
827	..	25a	
828-830	..	28a	On all the three coins.
831	..	28b	
832	..	28b	
833	42·75	29c	
834	42·0	29c	
835	41·5	29c	
836	41·25	29c	
837	41·25	29c	
839-844	40·5	29c	
845	..	82e	
846	..	122	Raised Protuberances on the Reverse.
847	..	178	
849	..	×	Incomplete.
850	..	×	
851	..	×	

See also coin No. 951 which belongs to this class.

CLASS IIIa

TWO REVERSE MARKS.

No.	Wt.	Size.	Marks		Remarks
852	..	..	1a	25a	
853	..	..	1a	180	
854	..	..	1d	25a	
855	..	..	11A	51c	
856	..	..	28a	11b	(Incomplete Mark.)
857	..	..	73g	99c	

DEFECTIVE.

858	..	..	Broken coin. No Reverse Marks on the preserved portion.
859	..	..	The Reverse Marks are flaked off.

CLASS IIIa ROUND.

PLAIN REVERSE.

860	39·5	·65×·65	
861	41·5	·68×·58	
862	39·5	·68×·64	
863	42·5	·70×·56	
864	44·0	·60×·58	
865	42·0	·67×·60	
866	42·0	·70×·63	
867	41·0	·76×·65	
868	44·5	·68×·60	Serpentines over Elephant and Shield over Serpentine.
869	43·0	·68×·68	
870	41·0	·70×·65	The Hare is clear. Pl. VI, 5.

ONE REVERSE MARK.

871	37·5	..	28b
872	43·0	..	40c
873	43·5	..	82e

TWO REVERSE MARKS.

874	41·5	1a	×
875	42·0	1a	×

CLASS IIIb

OBVERSE MARKS.

No. 1. Serpentines round a Boss ; No. 2, Taurine in a Shield ; No. 3b. Elephant facing to the left; No. 6. A Hare sitting.

PLAIN REVERSE.

No.	Wt.	Remarks
876	43·5	
877-879	43·0	
879-884	42·5	
885-887	42·0	
888-892	41·5	
893	41·0	
894	41·0	
895	40·5	
896	40·5	
897	40·0	
898	39·5	
899	39·0	
900	42·5	There are Raised Protuberances on the Reverse of coins 900 to 911.
901	42·0	
902	42·0	
903	39·5	
904	39·0	
905	39·0	
906	38·5	
907	41·0	
908	40·5	
909	41·25	Unusually large Elephant to r. Pl. VI, 7.
910	41·5	
911	40·5	Pl. VII, 19.
912	40·5	Obverse Mark 3a Tuskless Elephant facing to left twice and 3b (Elephant facing to left). Pl. VI, 9.

ONE REVERSE MARK.

913	..	7a
914	..	28a
915	..	51c
916	..	×

CLASS IIIb

TWO REVERSE MARKS.

No.	Wt.	Marks	Remarks
917	..	16b	×
918	..	99c	×

CLASS IIIb ROUND.

PLAIN REVERSE.

919	41·5	
920	43·0	
921	44·5	
922	43·0	
923	41·5	
924	41·5	
925	41·5	
926	42·5	
927	42·5	

ONE REVERSE MARK.

928	41·5	28a
929	40·5	106

CLASS IIIc

OBVERSE MARKS.

1. Serpentines round a Central Boss; 2a. Taurine in a Shield. 3. Elephant; the direction uncertain. 6. Hare sitting.

PLAIN REVERSE.

930-937	..	
938		Raised Protuberances.
939	..	Elephant not on the Coin.
940	..	Elephant not on the Coin.
941	..	Elephant not on the Coin.
941A	..	Pl. VI, 9.

ONE REVERSE MARK.

942	..	1b
943	..	51c
944	..	77e

CLASS IIIc

THREE REVERSE MARKS.

No.	Wt.	Marks			Remarks
945	..	28a	173	×	

CLASS IIIc ROUND.

PLAIN REVERSE.

946 ..
to
948 ..

CLASS IIIa (Supplementary list).

PLAIN REVERSE.

949-950 ..

ONE REVERSE MARK.

951	42·5	182	Pl. VI, 6.

CLASS IVa

There are no coins of Class IV on which the Elephant faces to the right.

CLASS IVb

OBVERSE MARKS.

1. Serpentines round a Central Boss; 2. Taurine in a Shield; 3b. Elephant facing to the left; 7. Humped Bull, facing to the left.

PLAIN REVERSE.

952	43·0		
953	43·0		
954	40·0		
955	41·0	17a	Pl. VI, 11.
956	42·0	29c	
957	42·0	×	and Raised Protuberances.

CLASS 4b

TWO REVERSE MARKS.

No.	Wt.	........Marks........				
958	41·50	4d	183			Pl. VI, 12.

THREE REVERSE MARKS.

959	40·0	1a	29c	×	Pl. VI, 13.

FOUR REVERSE MARKS.

960	42·0	1a	1n	15b	×
961	42·0	1e	1k	21c	×
962	42·25	1i	11b	24f	181
963	41·5	13b (var.)	15b	29a	×

FIVE REVERSE MARKS.

964	39·0	117	×	×	×	×

CLASS IVb. ROUND.

PLAIN REVERSE.

965	42·25
966	42·0

ONE REVERSE MARK.

967	37·25	1a	Defective coin ; has been clipped on one side.

THREE REVERSE MARKS.

968	42·25	4e	77d	×	Note the Flower Mark.

CLASS IVc

PLAIN REVERSE.

969 41·5 Note Flower Markings. Pl. VII, 20.

CLASS IVc

FIVE REVERSE MARKS.

No.	Wt.	..............Marks..............					Remarks
970	42·0	1a (Partly on) 11e	51c	83d	103c	×	Pl. VI, 14. Elephant stamped over other Marks.

CLASS Va. (NONE)

There are no coins of Class V on which the Elephant faces to the right.

CLASS Vb

OBVERSE MARKS.

1. Serpentines round a Central Boss; 2a. Taurine in a Shield; 3b. Elephant, facing to the left; 8. Sun and Crescent Moon.

TWO REVERSE MARKS.

971	41·0	1d	17e (Var.)	Clear Reverse Marks.
972	41·0	49	×	

FOUR REVERSE MARKS.

973	38·0	21g	×	×	×	Shield is stamped twice: once over an older mark of the Plain Taurine. This therefore appears to be a restamped **Double-Obverse Coin,** the other Obverse Marks of the Older Obverse being worn off. Pl. VI, 15.

FIVE REVERSE MARKS.

974	40·25	11b	16a	51b	×	×	Pl. VI, 16.
975	40·5	5A	27a	×	×	×	Pl VI 17.

CLASS Vb

EIGHT REVERSE MARKS

No.	Wt.	........Marks........					Remarks		
976	40·75	5A	7e	11e (large)	14g	19b	×	×	×

Last three marks are clear but incomplete ; they are overstamped.

TEN REVERSE MARKS.

977 41·5 1t 11e 77c Others are incomplete or confused Marks. Pl. VI, 18.

MANY REVERSE MARKS.

978 39·5 Only 11e can be clearly identified. The other Marks are completely mixed up with one another. But there appear to be some marks distinctive to this class of coins. Pl. VI, 19.

A DOUBLE-OBVERSE COIN.

979 41·0 { *Obv.*: Obv. of Vb ; see Pl. VI, 20, obv.
Rev.: Obv. of class IX ; Pl. VI, 20 older obv.

CLASSES I to V.

980 42·5 Round. Elephant to Right. Classes Ia—Va. Marks 1, 2, 3 are clear. Fourth mark is on the margin only and cannot be recognized.

981 40·5 Square. Elephant to left. Classes IIb to Vb. The Fourth mark only just shows on the edge of the coin. But from the size of the incuse, it is *not* the Pentagon ; so it is not Class I.

CLASS VI

OBVERSE MARKS.

1. Serpentines round a Central Boss ; 2a. Taurine in a Shield ; 7. Humped Bull facing to the left; 8. Sun and Crescent Moon.

CLASS VI

FOUR REVERSE MARKS.

No.	Wt.	......Marks......				Remarks
982	41·25	1f	51b	36d	163	Clear reverse Marks. Pl. VI, 21 (Reverse).

DOUBLE-OBVERSE.

The "Reverse" side is the Obverse of Class IX and the coins are old coins of that class, restruck.

983 40·75 Obverse Class VI, Pl. VI, 22. The Older Obverse of Class IX. Pl. VI, 22.

984 42·25 Obverse Class VI and Older Obverse of Class IX, Pl. VI, 23.

985 40·75 Do. Pl. VI, 24.

The Older Class IX, Obverse, has the Reverse Mark 68b, small but clear, punched on when that face was the Reverse of the later Class VI coinage.

CLASS VII ROUND

OBVERSE MARKS.

1. Serpentines round a Central Boss ; 2a. Taurine in a Shield ; 9. Palm Tree ; 8. Sun and Crescent Moon.

DOUBLE OBVERSE.

986 41·0 The "Reverse" of this coin is the Obverse of an older coinage of Class IX, as appears from its having Obverse Mark 12 (a Wheel) which is clear and is not overstamped, and Mark 11 (Hexagon) which is worn and is overstamped by the subsequent Reverse Marks during its later currency as Class VII. Pl. VI, 25.

FIVE REVERSE MARKS.

8c 76b × × ×

CLASS VIII

OBVERSE MARKS.

1. Serpentines round a Central Boss; 2. Taurine in a Shield; 10. A Tree with Branches; 8. Sun and Crescent Moon.

THREE REVERSE MARKS.

No.	Wt.	....Marks....			Remarks
987	42·0	6c	11Ab	23b	Pl. VI, 26.

FOUR REVERSE MARKS.

988	40·25	11b	68b	×	×	Pl. VI, 27.

CLASS IX

OBVERSE MARKS.

1. Serpentines round a Central Boss ; 2b. Large Plain Taurine ; 11. Hexagon formed of two Triangles ; 12. Wheel.

PLAIN REVERSE.

989 42·25 Pl. VII, 1.

THREE REVERSE MARKS.

990	40·5	17f	93a	184	Pl. VII, 3.
991	38·5	1d	1k	98h	Pl. VII, 4.

CLASS IX ROUND.

TWO REVERSE MARKS.

992	41·5	1f	7a	Pl. VII, 2.

DOUBLE OBVERSE COINS.

Coins of Class IX, which were restruck later as coins of Classes Vb, VI, and VII, and which have been entered in those Classes.

CLASS IX ROUND.

DOUBLE OBVERSE COINS.

No.	Wt.	. . . . Remarks	
973	38·0	Cl. Vb. On the Rev., older Obv. of Cl. IX.	
979	41·0	Cl. Vb. ,, ,, ,, ,, ,, ,, ,,	Pl. VI, 20.
983	40·75	Cl. VI. ,, ,, ,, ,, ,, ,, ,,	Pl. VI, 22.
984	42·25	Cl. VI. ,, ,, ,, ,, ,, ,, ,,	Pl. VI, 23.
985	40·75	Cl. VI. ,, ,, ,, ,, ,, ,, ,,	Pl. VI, 24.
986	41·0	Cl. VII (Round) ,, ,, ,, ,,	Pl. VI, 25.

CLASS X. (ROUND)

OBVERSE MARKS.

1. Serpentines round a central Boss; 2b. Large Plain Taurine; 11. Hexagon Formed of two Triangles; 13. Rayed Circle, the rays curving to the left. The Sun [?]

FIVE REVERSE MARKS.

993 42·0 1d, 4a, 8c, 11Ab, 56b Pl. VII, 5.

CLASS XI

OBVERSE MARKS

The same as CLASS X. Except that Mark 13 (Rayed Circle) occurs in different varieties.

THREE REVERSE MARKS.

DOUBLE OBVERSE COIN.

994 42·0 1b, 83l, 93c Pl. VII, 6.

There is a much worn Hexagon on the reverse which has been overstamped by the Reverse Marks. This shows that the reverse face was previously the Obverse of one of the Classes IX to XIII which bear that Mark.

FIVE REVERSE MARKS.

995 42·5 4e (var.), 7a, 14d, 35c, 38c Pl. VII, 7.

CLASS XI

SIX REVERSE MARKS.

No. Wt. ....Marks........

996 40·0 1f, 11Ab, 29a, 77d, 186 Pl. VII, 8.

EIGHT REVERSE MARKS

997 42·25 1t, 11k, 14e, 15a, 125c, 185 × ×
Pl. VII, 9.

NINE REVERSE MARKS

988 41·25 1f, 1q, 16a, 83d, 83h, 83i × × ×
Pl. VII, 10 (Reverse).

TWELVE REVERSE MARKS

999 41·5 11Ab, 19c (var.), 192, 192, 192 (three times) and seven other confused marks. Pl. VII, 11.

FIFTEEN REVERSE MARKS.

1000 41·25 7b, 10aa, 64 and twelve other Marks, too confused to identify. Pl. VII, 12.

CLASS XI ROUND.

SEVEN REVERSE MARKS.

1001 42·0 1t, 1q, 2b, 92c, × × × Pl. VII, 13. (Reverse).

CLASS XII.

OBVERSE MARKS.

The same as Classes X and XI, but mark 13 is of a different variety. It is almost worn off on coin 1002.

NINETEEN REVERSE MARKS.

1002 41·0 1f, 3b, 19c, 82f and fifteen other marks which are all overstamped and confused. Pl. VII, 14.

CLASS XII ROUND.

FOURTEEN REVERSE MARKS.

No. Wt.

1003 41·5 1n, 9a, 9a (twice) 93c, 93c (twice of different punches), 93d, 187, and at least seven other confused Marks. Pl. VII, 15.

CLASS XIII

OBVERSE MARKS.

Mark 1 (the Serpentines); Mark 2b (Hexagon); does not show, Mark 13 (a Variety) and a Reverse Mark of a central Boss with Pellets round it.

THREE REVERSE MARKS.

1004 30·0 Defective coin, part flaked off.
55, 73s, × Pl. VII, 16.

UNCLASSIFIED

1005 37·5 Defective Coin. Obverse surface flaked off. Only Mark 2a (Taurine in a Shield) is identifiable.

N. B. Owing to War conditions it was not possible to send any proof of this paper to its author. Every effort has been made to correct printing mistakes, but it is possible that some may have remained undetected, especially as the MS. was a handwritten one.—EDITOR, A. S. A.

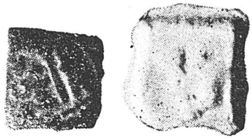
A NOTE ON THE SHAMIWALA (BIJNOR DIST.) HOARD OF SILVER COINS.

By E.H.C. Walsh, I.C.S. (Retired).

In his interesting paper on "Shamiwala (Bijnor Dist.) Hoard of Silver Punch-marked Coins" in this Journal for 1939, pp. 1—4, Mr. Durga Prasad describes those coins as being punch-marked, though, on page 3, he notes that "as all the coins are stamped on one side with a small punch and there are no symbols on the reverse as seen usually on other types of punch-marked coins, the question arises whether they should be classed as punch-marked coins, or among the early one-sided die-struck coins, examples of which are known among Taxila copper-coins, though none have yet come to light in silver." These coins, which formed "Treasure Trove Report File No. 12 of 1920" were with the late Mr. W. E. M. Campbell at the time of his death, and had been deposited by him in the British Museum. After Mr. Campbell's death they were forwarded to me by the British Museum, in 1924, together with other coins which had been with Mr. Campbell, and I forwarded them to the Lucknow Museum. I then saw these coins. There is no doubt that they are die-struck coins. The point is material with reference to the age of the coins. The idea of combining the marks separately punched on the punch-marked coins into one die covering the entire face of the coin, was, certainly, a later development.

THREE NEW SPECIMENS OF A RARE VARIETY OF ERAN-UJJAYINI COINS.

By H. D. Sankalia, M.A., Ph. D.
Deccan College Research Institute, Poona.



These coins were recently purchased by Father Heras for the Museum of the Indian Historical Research Institute, St. Xavier's College, Bombay. I am thankful to him for handing them over to me for identification and publication.

Coin No. I.—

Metal	Æ
Size	Roughly rectangular (about 0.5″ in breadth and about 0.6″ in length).
Weight	Not known.[1]
Obverse	To the left, circle surrounded by six symbols, two of which are taurines, two arrows, and two circles with semi-circles standing apart. In the centre a staff is surmounted by a taurine symbol. To the right, a worn out human figure.
Reverse	In the lower field *Svastika*, portions of the left and lower arms partly obliterated.

Coin No. II—

Metal	Æ
Size	Roughly rectangular (about 0.6″ in breadth and about 0.7″ in length).

[1] I regret that I am unable to give the weights of these coins, for after I took the plaster-casts, Father Heras suddenly left for Spain, and the coins were left at Kodaikanal.

Weight	Not known.
Obverse	In an incuse circle (which is incomplete on the left side), symbols as in No. I, but very indistinct; the human figure, however, is holding in its right hand the staff in the centre.
Reverse	Is now blank, but there might have been a *Svastika*, which has disappeared owing to use.

Coin No. III—

Metal	Æ
Size	Roughly rectangular (about 0.5″ in breadth and about 0.6″ in length).
Obverse	In an incuse but incomplete circle, the same symbols as in No. 1 above; but the first one is incomplete. Below all the three symbols traces of river with fish as on other Mālwā coins.
Reverse	*Svastika,* ends of whose arms were once ornamented with a taurine symbol, in bold relief, with the bottom arm's end cut off.

All the three coins evidently are of an identical variety, which is rare both at Eraṇ and Ujjayinī. Cunningham published only one specimen of it among his Ujjayinī list and considered it an interloper from Eraṇ, or East Mālwā, where, he said, similar coins were found.[2] But only one coin (No. 20) of his Eraṇ list resembles our coins in both the obverse and the reverse, whereas others (Nos. 16 and 17) have a different obverse and reverse.

Mr. Allan [3] includes this variety (published by Cunningham) among the Ujjayinī list along with two other specimens from Steuart and Prinsep collections (*Catalogue*, pp. 253-4), whereas slightly different varieties of this coin have also been described by him though illustrated among the Eraṇ and Kanauj-Kāḍa groups.

On comparing the representation of the staff [4] and the taurine symbol in our coins as well as that in Cunningham's, it appears that in both the taurine symbol actually touches the staff, and does not seem to be aloof as the drawings in Allan's would suggest. Further in our coin No. II the standing figure seems to have held the staff with its right hand. [4]

Since Cunningham's time no coins of this type described here seem to have been published, and since our coins show some peculiarities which are noted above and are not found in the coins hitherto published, they may deserve notice.

---

2 *Coins of Ancient India,* 1891, p. 96, Pl. X, 11.

3 *Catalogue of Coins of Ancient India,* 1936, pp. 253-4.

4 Father Heras drew my attention to similar representations in early Egyptian sculpture. But I have not been able to pursue the matter further because of the reasons mentioned in Note 1 above.

A NEW HOARD OF SĀTAVĀHANA COINS FROM TARHĀḶĀ (AKOLĀ DISTRICT).

By Prof. V. V. Mirashi, M.A., Nagpur.

[Plate VIII.]

On the 6th of September 1939, a grazier boy, nine years old, found by chance an old coin on the bank of a *nala*, flowing through the field, Survey No. 120, at Tarhāḷā, a village about 7 miles north by west of Mangruḷ in the Mangruḷ *tālukā* of the Akolā District in Berar. He told his companions about it and the latter, digging at the place, came upon an earthen pot containing this large hoard of 1600 Sātavāhana coins. They were, in due course, acquired by the Provincial Government under the Treasure Trove Act and presented to the Central Museum, Nagpur. When discovered, the coins were covered with a coating of dirt and rust, but they have since been cleaned with great patience and thoroughness by Mr. M. A. Suboor, the Coin-Expert of the Museum. In the ordinary course, the coins would have been dealt with by Mr. Suboor, but knowing my keen interest in the matter, he ungrudgingly placed the whole hoard at my disposal. I am obliged to him and to Dr. S. S. Patwardhan, Curator of the Museum, for their kind help in various ways.

This is the second hoard of Sātavāhana coins to be discovered in the Central Provinces and Berar. The first one was discovered more than fifty years ago, in 1888, in a village, the name of which has not been recorded, in the Brahmapurī *tahsil* of the Chāndā District in the Central Provinces, and is known to numismatists as the Chāndā hoard. The coins of that hoard, which numbered only 183, were sent by Mr. J. Higgins, D. S. Police, to the Asiatic Society of Bengal in November 1888. They were examined by Dr. Hoernle, whose report on them was read at a meeting of the Society held on the 7th June 1893 and is published in the *Proceedings* of the Society for 1893, pp. 116-117. Dr. Hoernle found in that hoard 51 coins of Śrī Sātakarṇi, 24 coins of Śrī Puḷumāvi and 42 coins of Śrī Yajña Sātakarṇi. He identified these kings with Sātakarṇi-Gautamīputra I, Puḷumāvi-Vāsishṭhīputra and Yajña Sātakarṇi-Gautamīputra II. He also noticed therein some more coins with imperfect legends, *viz.*, one with *ya* (*gada ?*) *Sāta*[1], two with *Siri* (or *ri*) *Kaṇu Sāta* and two with *rajño* (or *jño*) *Va*, but he did not offer any suggestions about the identifications of these

---

[1] What Hoernle meant was probably *ya* (*ga?*) *da Sāta*.

kings. Some coins of this hoard were subsequently presented to the British Museum, London, and the Indian Museum, Calcutta, and some seem to have found their way to private coin-cabinets[2]. The coins presented to the British Museum have been discussed by Prof. Rapson in an article in the *J.R.A.S.* (1903), pp. 303ff. and included in his *Catalogue of the Coins of the Andhras*[3], etc. When Vincent Smith catalogued the coins in the Indian Museum, he found that most of the Āndhra coins in that museum were from the Chāndā hoard.[4]

As stated before, the present hoard contains about 1600 coins. Of these, 1525 were recovered entire and the remaining, which numbered about 75, were found broken to small bits. All the coins are of the Sātavāhana kings. It is noteworthy that there is not a single coin in the hoard of any other dynasty indigenous or foreign. All the coins are of potin, but the proportion of ingredients in that alloy was evidently different in different issues, for while some coins appear blackish even after thorough cleaning, others are almost as bright as copper.[4a] All the coins are round and die-struck. Rapson[5] and Smith,[6] while describing the potin coins of the Chāndā hoard, have remarked that the Āndhra coins of potin were cast and not die-struck. This does not appear to be correct. For the present hoard, which is of the same metal and type, contains several coins which clearly exhibit the incuse formed by the striking of the die[7]. Some coins are double struck on both the sides.[8] The coins are all of a uniform type. They are roundish in shape and have on the obverse, the figure of an Elephant with the trunk upraised and the legend running along the edge, and, on the reverse, the Ujjain symbol, each orb of which contains a pellet. The Elephant faces right except on the coins of Karṇa Sātakarṇi.[9] The legends seem to have commenced at VII, but as the die was in every case larger than the blank, only the portion between IX and I or II is visible on most of the coins. On some coins, however, the initial portion of the legend has come out intact, which has enabled me to correct in some cases the prevailing readings of the legends on the coins of the Chāndā hoard. The legends seem to have ended

---

2 One coin of the Chāndā hoard was in the possession of Mr. P. Thorburn and has now been purchased by Mr. M. F. C. Martin. See *J. A. S. B., Num. Suppl. XXX* (1934), Art. 318.

3 This is hereafter referred to as *B. M. C.*

4 V. Smith, *I. M C.*, p 209

4a The coins, when analysed, were found to contain copper (about 75 to 80%), tin (about 20%) and traces of iron.

5 *J. R. A. S.* for 1903, p. 307.

6 V. Smith, *I. M. C.*, p. 209.

7 See e.g., Pl. VIII, Nos. 19 and 20.

8 See Pl. VIII, Nos. 33 and 34.

9 See Pl. VIII, Nos. 26 and 27. In No. 28 the Elephant faces right, but that is because of the die being wrongly made. See below, p. 89.

at II near the tip of the upraised trunk of the Elephant. The portion in front [10] and below [11] the feet of the Elephant is blank. Another thing to be noticed in connection with the obverse type is that there is no *mahaut* on the neck of the Elephant. What Hoernle [12] and following him, Vincent Smith [13] and Rapson [14] took to be the figure of a crouching *mahaut* is only the trappings for the neck and head of the Elephant.

The 1525 coins of this hoard can be classified as follows :—

Serial No.	No. in the Purāṇa list according to Pargiter. [15]	Name of King.	No. of coins.
1	23	Śrī-Sātakarṇi (III)—(Gautamīputra)	573
2	24	Śrī-Puḷumāvi (II)	174
3	24a	Śrī-Sātakarṇi (IV)	35
4	25	Śiva-Śrī-Puḷumāvi (III)	32
5	26	Śrī-Skanda-Sātakarṇi	23
6	27	Śrī-Yajña-Sātakarṇi	248
7	28	Śrī-Vijaya-Sātakarṇi	4
8		Śrī-Kumbha-Sātakarṇi	56
9		Śrī-Karṇa-Sātakarṇi	7
10		Śrī-Śaka-Sātakarṇi	4
11	30	(Śrī) Pulahāmavi	4
	Coins with no legends or with illegible legends		365
			1,525

Kings Nos. 8—10 are not known from any other source, numismatic or inscriptional.

The legends on the coins are in Prakrit and contain the name of the reigning king in the genitive case. As was already noted by Rapson, metronymics are altogether absent on these coins of ancient Vidarbha. [16] The other statement of Rapson that the title Rāja does not occur on the coins of the Chāndā hoard [17] is, however,

10 Hoernle found one coin in the Chāndā hoard on which *ratasa* (*kanasa ?*) appeared in front of the Elephant. There is no coin like it in the present hoard.

11 Only in one case (Pl. VIII, No. 21) have I observed two *aksharas* (*raña*) below the feet of the Elephant.

12 *Proceedings A. S. B.* for 1893, p. 116.

13 *I. M. C.*, p. 210, Pl. XXIII, 18.

14 *B. M. C.*, p. 42, n. 1 ; p. 48, n. 2 etc.

15 *Dynasties of the Kali Age*, p. 36.

16 *Ibid.*, Introduction, p. cxc.

17 *Loc. cit.*

incorrect; for as shown below, the coins of the two Sātakarṇis and two Puḷumāvis begin with the title *raṇa* (properly *raṇṇo*, Sanskrit *rājñaḥ*). This form of the Prakrit word was changed to *rañа* (properly *rāño*) in the time of Yajña-Sātakarṇi. As the initial few *aksharas* of the legends on the coins of the later kings are cut out, it is not possible to say if they bore this or any other title.[18]

With these preliminary remarks, I shall now proceed to give a detailed description of these coins.

I. The Coins of Śrī-Sātakarṇi III (Gautamīputra). Total No. 573.

Potin; obv. Elephant with trunk upraised, standing to right; rev. Ujjain symbol; complete legend, *Raṇā(ṇṇo) Siri-Sātakaṇisa.*

	Legend	Size, diameter in inches	Weight in grains	Reference
(1)	Obv. *-ṇā Siri-Sātaka-*	; .7 ;	Wt. 39.5 ;	Pl. VIII, 1
(2)	Obv. *-ṇ[ā] S[i*]ri-Sāta-*	; .73 ;	Wt. 44 ;	Pl. VIII, 2
(3)	Obv. *[-ri]-Sātakaṇisa*	; .8 ;	Wt. 60.5 ;	Pl. VIII, 3
(4)	Obv. *-takaṇ[i*]-*	; .75 ;	Wt. 50 ;	Pl. VIII, 4
(5)	Obv. *-S[ā]takaṇisa*	; .7 ;	Wt. 39.5 ;	Pl. VIII, 5
(6)	Obv. *-S[ā]takaṇisa*	; .65 ;	Wt. 31.5 ;	Pl. VIII, 6
(7)	Obv. *-[Sā]takaṇisa*	; .7 ;	Wt. 44 ;	Pl. VIII, 7

The coins with the legend *Sātakaṇisa* are the largest in number in this hoard; but they are not all likely to be the issues of the same king. Some of them have the legend in large and thick letters[19], and others in small and thin ones[20]. In the latter case the legend nowhere appears complete, only the portion *Sātakaṇi* or *Sātakaṇisa* having come out on the blank. As the names of several kings represented in this hoard end in *Sātakarṇi* and the legends on their coins are in similar small and thin letters, it is not unlikely that these coins with the legend *Sātakaṇisa* in small and thin letters belong to these later kings. Such coins number about 90. Most of the coins have the lingual *ṇ* in the name Sātakaṇi, but some have the dental *n* with a curved base. These coins I have assigned to Sātakarṇi IV mentioned in a MS. of the *Vāyu-purāna*, as the grandson of Sātakarṇi III[21].

Vincent Smith and Rapson differ from Hoernle and ascribe the coins with the legend *Siri-Sātakaṇisa* to Śrī-Yajña-Sātakarṇi on the ground that the coins of the two classes are most closely connected by community of types and by the similarity of their in-

---

18 The coins of Vijaya-Sātakarṇi probablybore title *rāño*, see below.
19 See the legends of Nos. 1—5.
20 See the legends of Nos. 6 and 7.
21 See below, pp. 85-86.

scriptions.[22] Another reason advanced in favour of this attribution is that elsewhere (*e.g.*, in the Āndhra country), the Elephant appears as a type in the latter part of the reign of Śrī-Yajña.[23] As Hoernle has given no reasons for attributing these coins to Gautamīputra-Sātakarṇi in preference to Śrī-Yajña-Śātakraṇi, it is necessary to examine the above arguments. None of them is convincing. The evidence of the present hoard shows that the type (Elephant with trunk upraised, standing to right) was long current in ancient Vidarbha. It is found on the coins of the two Puḷumāvis who undoubtedly preceded Yajña-Sātakarṇi. Besides, the royal title on these coins of Sātakarṇi is *raṇā* (for *raṇṇo*, Sanskrit *rājnaḥ*) while it is *raña* (for *rāño*) on the coins of Yajña. Again, the legends on these coins are in bold and archaic letters, whereas the general tendency in later times was to use small and thin letters. For these reasons [24] I ascribe these coins to Gautamīputra-Sātakarṇi. His metronymic is omitted as in the case of so many other kings represented in the present hoard.

II. The Coins of Śrī-Puḷumāvi (II) (Vāsishṭhīputra). Total No. 174.

Potin ; obv. Elephant with trunk upraised, standing to right ; rev. Ujjain symbol; complete legend, *Raṇā Siri-Puḷumāvisa*.

(1) Obv.	*Raṇā Siri-Puḷum[ā]-*;	.8 ;	Wt. 43 ;	Pl. VIII, No. 8
(2) Obv.	*-Pulumāv[i]sa* ;	.7 ;	Wt. 44 ;	Pl. VIII, No. 9
(3) Obv.	*-ḷamāv[i]sa* ;	.75 ;	Wt. 41 ;	Pl. VIII, No. 10

This Puḷumāvi is plainly Vāsishṭhīputra-Puḷumāvi, the son and successor of Gautamīputra-Sātakarṇi III. As in the case of Sātakarṇi III, all the coins with the imperfect legend *Puḷumāvisa* may not belong to him, as there was another homonymous prince Śiva-Śri-Puḷumāvi who flourished a little later. See below, No. IV.

III. The Coins of Sātakarṇi IV[25]. Total No. 35.

Potin ; obv. Elephant with trunk upraised standing to right ; rev.

---

[22] *J. R. A. S.* for 1903, p. 305 ; *B. M. C.*, Introd., p. lxxx, n. 3. In *I.M.C.*, pp. 210-11, Smith attributes these coins doubtfully to Puḷumāvi, son of Vāsishṭhī.

[23] *B. M. C.*, Introd., p. lxxx.

[24] [Another reason for which Rapson attributed these coins to Śrī-Yajña-Sātakarṇi seems to have been his view that Śrī-Sātakarṇi was an abbreviation of Śrī-Yajña-Sātakarṇi (*Catalogue*, p. lxxx, n. 3). The coins Nos. 164 and 165 of his catalogue, illustrated in plate VII, as well as coins Nos. 18 and 19 illustrated with this paper, would show that when pressed for space, mint masters were instructed to omit the opening letters *Raña* or the concluding letters *kaṇi*. King Yajña Sātakarṇi would never have allowed the word *Yajña* to be omitted for the sake of abbreviation, as that would have rendered his coins indistinguishable from those of a number of his predecessors, who also bore the common title Sātakarṇi.—EDITOR, A. S. A.]

[25] The coins of Vāsishṭhīputra Śiva-Śrī-Sātakarṇi (*B. M. C.*, p. 29) may belong to this king. In that case he would be a brother of Puḷumāvi III.

Ujjain symbol; the complete legend may have been *Raṇā Siva-Siri-Sātakaṇisa*, but none of the coins in this hoard shows the initial portion.

(1) Obv. [*-ta*]*kan*[*i**]*sa* ; .8 ; Wt. 38.5; Pl. VIII, No. 11
(2) Obv. *S*[*a**]*takan*[*i**]- ; .7 ; Wt. 26.5; Pl. VIII, No. 12

I tentatively attribute these coins to Sātakarṇi IV, because the characters on these coins appear later than those on the coins of Sātakarṇi III. See especially the dental *n* with a curved base like that of *t*, and contrast it with the earlier form of the letter *ṇ* (in Nos. 1—7), which has a horizontal base. The letter *n* in the royal name is dental and is formed like t. According to a MS. of the *Vāyupurāṇa* this king reigned for 29 years.[26]

IV. The Coins of Śiva-Śrī-Puḷumāvi (III). Total No. 32.

Potin; Obv. Elephant with trunk upraised, standing to right; rev. Ujjain symbol; complete legend—*Raṇā Siva-Siri-Puḷumāvisa.*

(1) Obv. *Raṇā Siva-Sir*[*i**]*-Puḷu-* .65; Wt. 37 ; Pl. VIII, No. 13
(2) Obv. *-va-Siri-Puḷumāvi*[*sa*]; .75; Wt. 50 ; Pl. VIII, No. 14

This king is not represented in Rapson's *Catalogue of Andhra Coins*. In his list of Āndhra kings, Rapson gives his name as Śivaśrī, to whom he ascribes the coins with the legend *Vāsiṭhi-putasa Siva-Siri-Śātakaṇisa*. But as shown by Pargiter[27], the *Matsya-purāṇa* and one MS. of the *Vāyupurāṇa* clearly give his name as Śiva-Śrī-Pulomā with a reign-period of 7 years. In the Chāndā hoard there were some coins, the legend on which Hoernle conjecturally read as [*Si*]*va-Siri-Puḷumāvisa*, but he admitted that the first *akshara si* of *Siva* was uncertain. He thought it not improbable that the intended word was *raño*, not *Siva*[28]. Rapson suggested that the traces read as *Siva* might only be the traces of some symbol, perhaps a conch-shell[29]. Recently Mr. M. F. C. Martin has stated that among the coins which he purchased from Mr. P. Thorburn, there is one from the Chāndā hoard, which has the legend *Siva-Siri-Puḷumā*[*visa*] quite clear.[30] One of the coins illustrated here exhibits not only this name, but also the title *raṇā*. If we admit Sātakarṇi IV as the son and successor of Vāsishṭhī-putra-Puḷumāvi, this Śiva-Śrī-Puḷumāvi becomes the latter's grandson.

This appears quite plausible, as in India children are often

---

26 *Dynasties of the Kali Age*, p. 42.
27 *Ibid.*, p. 42.
28 *Proceedings, A. S. B.* for 1903, p. 117.
29 *J. R. A. S.* for 1903, p. 306.
30 *J. A. S. B.* for 1934, *Num. Suppl.*, Art 318.

named after their grandfather. The coins with the legend *Siva-Siri-Puḷumāvisa* number only 32, but as stated above, some of the coins with the fragmentary legend *Puḷumāvisa* may belong to him.

V. The Coins of Śrī-Skanda-Sātakarṇi. Total No. 23.

Potin ; obv. Elephant with trunk upraised, standing to right ; rev. Ujjain symbol ; complete legend, (*Raṇā*] *Siri-Khada-Sātakaṇisa*.

(1) Obv. *S*[*i**]*r*[*i**]-*Khada-Sātaka-* ; .75 ; Wt. 50 ; Pl. VIII, No. 15

(2) Obv. *r*[*i**]-*Khada-Sā—* ; .65 ; Wt. 42 ; Pl. VIII, No. 16

The name of this king is correctly read here for the first time. In the Chāndā hoard there was a coin, the legend of which Hoernle doubtfully read as *ya*(*ga*)*da Sāta*. Vincent Smith's Catalogue includes a coin of this type, but he read the legend as *Sari Chaḍa Sāta*[*kaṇi*], while the plate clearly shows *Sari-Khada-Sāta*—.[31] The lower curve of *d* appears joined to the left limb of *s*, which seems to have misled Vincent Smith into reading it as lingual *ḍ*. The preceding *akshara* is clearly *kha*. On several coins of this king from the present hoard, the *akshara kha* is partly cut on the left-hand edge, only the vertical being left over. This vertical has in some cases a short serif at the lower end.[32] The coin No. 179 in Rapson's Catalogue (Pl. VII) is a coin of this type. Although it is recorded to have been found in the Krishṇā District, it is of the same type and fabric as the coins of the Chāndā District. Rapson read the legend[33] as [*Ru**]*da-Sātaka*—, but the reading is certainly wrong[34] in view of the several clear specimens of that type in the present hoard. This *Khada Sātakaṇi* is undoubtedly Śiva-Skanda-Sātakarṇi,[35] whom the Purāṇas mention as the son and successor of Śiva-Śrī-Puḷumāvi. A MS. of the *Vāyupurāṇa* assigns a reign-period of 3 years to him.

VI. The Coins of Śrī-Yajña-Sātakarṇi. Total No. 248.

Potin ; obv. Elephant with trunk upraised, standing to right ; rev. Ujjain symbol ; complete legend, *Raña Siri-Yaña-Sātakaṇisa*.

(1) Obv. *Raña S*[*i**]*ri-Yaña-* ; .7 ; Wt. 43 ; Pl. VIII, No. 17

(2) Obv. *-Yaña-Sātakaṇi*[*sa*] ; .7 ; Wt. 49 ; Pl. VIII, No. 18

---

31 *I.M.C.*, p. 213 and Pl. XXIII, 24 (? 22).

32 See *kha* in No. 16 illustrated here.

33 *B.M.C.*, p. 46.

34 There was, of course, an Āndhra king named Rudra-Sātakarṇi, as a coin (*B. M. C.*, Pl. VII, G. P. 2) gives his name clearly. But he ruled in Āndhra, not in Vidarbha.

35 These coins show that the name *Siva-Skanda* (not—*Skandha*) which occurs in two MSS. of the *Vishṇupurāṇa* is the correct one. See Pargiter's *Dynasties of the Kali Age*, p. 42, n. 5. For another instance of the Prakrit *Khada* being taken as equivalent to *Skanda*, see No. 1186 in Lüders' *List of Brāhmī Inscriptions*, *Ep. Ind.*, Vol. X, App., p. 136.

(3) Obv. -*Yaña-Sāta* ; .7 ; Wt. 40 ; Pl. VIII, No. 19
(4) Obv. -*r*[*i**]-*Yaña-Sā* ; .66 ; Wt. 39 ; Pl. VIII, No. 20
(5) Obv. *Raña S*[*i**]*r*[*i**]-[*Yaña*]—.67 ; Wt. 39.5 ; Pl. VIII, No. 21

The coins of this king in the hoard are less than only those of Sātakarṇi III—Gautamīputra. Worthy of note is the change in the Prakrit form of the royal title prefixed to his name. It is *raña*[36] (properly *rāño*, Sanskrit *rājñaḥ*) in place of the previous *raṇā* (properly *raṇṇo*). As the legend was rather long, it is found in some cases abbreviated into—*Yaña-Sāta*, or even—*Yaña-Sā*. See coins 3 and 4 above, (Pl. VIII, Nos. 19 and 20). The incuse on the right side of these coins shows that the legend ended there.

VII. The Coins of Śrī-Vijaya-Sātakarṇi. Total No. 4.

Potin ; Obv. Elephant with trunk upraised, standing to right ; rev. Ujjain symbol ; complete legend, *Raño* [*Siri*]-*Vijaya-Sātakaṇisa*.

(1) Obv. -[*ja*]*ya-Sātakaṇ*[*i*]— ; .68 ; Wt. 31 ; Pl. VIII, No. 22
(2) Obv. -*ya-Sātaka-* ; .65 ; Wt. 45 ; Pl. VIII, No. 23

There are only four coins of this king in the present hoard. The name *Vijaya* does not occur completely on any of them, but the aksharas *ya-Sātaka* or *ya-Sātakaṇi* are clear on all of them. Two of them, again, exhibit the lower curve of *j* on their left edge. As there is no other king in the Āndhra dynasty, whose name ended in *ya*, I ascribe these coins to Vijaya-Sātakarṇi, whom the Purāṇas mentions as the son and successor of Śrī-Yajña-Sātakarṇi, with a reign-period of 6 years. In the Chāndā hoard there were two coins with fragmentary legends which Hoernle read as *rajño Va* or *jño Va*. They also probably belonged to the same king. These latter coins have not been illustrated anywhere, but if Hoernle's readings were correct, we must hold that the legend on the coins did not contain the honorific *Siri* (Śrī) prefixed to the royal name. No other coins of this king have been reported till now.

VIII. The Coins of Śrī-Kumbha-Sātakarṇi. Total No. 56.

Potin ; obv. Elephant with trunk upraised, standing to right ; rev. Ujjain symbol ; complete legend, [*Raño*] *Siri-Kubha-Sātakaṇisa*.

(1) Obv. *S*[*i**]-*ri-Kubha-Sātaka-*; .67; Wt. 30 ; Pl. VIII, No. 24
(2) Obv. -*r*[*i**]-*Kubha-Sātaka-* ; .6 ; Wt. 29.5 ; Pl. VIII, No. 25

---

36 Hoernle read the legend on the coins of this king from the Chāndā hoard as **ta Siri-Yaña-Sātakaṇi*, but in a note added that it was not improbable that the word to be supplied was *rājño*. (*Proceedings A. S. B.* for 1893, p. 117.) Rapson on the other hand thought that the signs might possibly only be parts of some symbol, perhaps a conch-shell. (*J. R. A. S.* for 1903, pp. 304-5.)

The coins of this king are coming to light for the first time. He is not mentioned even in the Purāṇas. He perhaps flourished at a time when the kingdom of this branch of the Sātavāhanas was confined to ancient Vidarbha.

IX. The Coins of Śrī-Karṇa-Sātakarṇi. Total No. 7.

Potin; obv. Elephant with trunk upraised standing to left; rev. Ujjain symbol; complete legend, [*Raño*] *Siri-Kaṇa-Sātakaṇisa*.

(1) Obv. *na-Sāta-* ; .65 ; Wt. 30.5 ; Pl. VIII, No. 26

(2) Obv. *-Kana-S[ā*]ta* ; .65 ; Wt. 33.5 ; Pl. VIII, No. 27

(3) Obv. (reversed legend)-*ri-Kana-Sāta* ; .65 ; Wt. 36 ; Pl. VIII, No. 28.

The lower bar of the akshara *na* is bent in No. 26, while it forms a loop in No. 27. On two coins the die appears to have been wrongly formed,[37] as the *aksharas* appear reversed and the Elephant faces right. Two coins of this king were found in the Chāndā hoard also. Hoernle read the legend as *Siri-Kaṇu-Sāta* on one and *-ri Kaṇu* Sāta on the other. The latter coin was presented to the British Museum and is included as No. 180 in Rapson's *Catalogue* (Pl. VII). On this coin, however, the Elephant stands facing right. Rapson read the legend as [-] *ri-Kaṇha-Sāta[ka—]*.[38] The second *akshara* of the name is however not *ṇha*. The bent right end of the lower horizontal stroke of *na* has been attached to the lower curve of the left limb of the next letter *sa* ; this produces the false impression of the *akshara* being *ṇha*. In view of the coins illustrated here, which are of the same type and fabric, I have no doubt that the correct read ing of the aforementioned Chāndā coin is *Kaṇa*, not *Kaṇha*. The corresponding Sanskrit name would be *Karṇa*. There were several kings in this dynasty whose names, according to the *Matsyapurāṇa*,[39] ended in *karṇa*, e.g., Nos. 12-14, Svātikarṇas, No. 16, Arishṭakarṇa, No. 20, Sundara Śāntikarṇa, No. 21, Chakora Svātikarṇa, No. 29, Chaṇḍaśrī Śāntikarṇa, but all of them, except the last one, flourished before even Gautamīputra-Sātakarṇi III, while the form of *n* in *Kana* on the coins described above indicates that the king Karṇa flourished long after Gautamīputra, at least not earlier than the second century A. D. If Chaṇḍaśrī really bore the name Śāntikarṇa,[40] these coins may have been struck by him.

---

37 See e.g., coin No. 28 in Pl. VIII. For other instances of such a mistake see *B. M. C.*, p. 4.

38 *J. R. A. S.* for 1903, p. 306 ; *B. M. C.*, p. 48.

39 See the list of the Andhra kings according to the *Matsyapurāṇa*, *B. M. C.*, Introd. pp. lxvi and lxvii.

40 Other Purāṇas name him as Sātakarṇi.

X. The Coins of Śrī-Śaka-Sātakarṇi. Total No. 4.

Potin ; obv. Elephant with trunk upraised, standing to right ; rev. Ujjain symbol ; complete legend, [*Raño Siri*]-*Saka* (or *Sakasa*) *Sātakaṇisa*.

(1) Obv. -*kasa Sātaka*—	; .7	; Wt.	34	; Pl. VIII, No. 29
(2) Obv. -[*ta*] *Saka-S*[*ā*]—	; .7	; Wt.	37	; Pl. VIII, No. 30

The coins of this king also have not been known before. Śaka Sātakarṇi is not mentioned in the Purāṇas. We know of course of a Haku-śrī from a Nānā-Ghāṭ inscription and it is true that *s* and *h* were interchangeable in Prakrit. But this Haku-śrī flourished long before the kings represented in this hoard. It seems therefore that this Śaka Sātakarṇi, like Kumbha Sātakarṇi, ruled only in Vidarbha[41] and so his name does not figure in the Purāṇic lists.

XI. The Coins of Śrī-Puḷahāmavi. Total No. 4.

Potin ; obv. Elephant with trunk upraised, standing to right ; rev. Ujjain symbol ; complete legend, [*Raño Siri*]- *Puḷahāmavisa*.

(1) Obv. -*P*[*u*]*ḷahāma*-	; .65	; Wt.	40.5	; Pl. VIII, No. 31
(2) Obv. -*Puḷahāma*-	; .66	; Wt.	51	; Pl. VIII, No. 32

The second *akshara* of this king's name which appears somewhat like *sa* must be read as *ḷa* in view of the forms of that letter in the legends of Puḷumāvi II (Vāsishṭhīputra).[42] I ascribe these coins to the last king, because his name is not spelt like that of (Vāsishṭhīputra)-Puḷumāvi or of Śiva-Śrī-Puḷumāvi. According to the Purāṇas, he was the last king of the Āndhra dynasty and ruled for 7 years only.

The discovery of this large hoard in Berar raises the interesting question of the home of the Sātavāhanas. In the Purāṇas these kings are called Āndhras, but it has been pointed out that their earliest inscriptions and coins have been found outside the Āndhra country. The earliest Sātavāhana king whose records and coins come from the Āndhra-deśa is Vāsishṭhīputra-Puḷumāvi,[43] but he stands very low, being the twenty-fourth in the Purāṇic list. Besides, in the Hāthīgumphā inscription the king Khāravela of Kaliṅga is said to have dispatched a strong army to the west, disregarding Sātakarṇi and to have reached the Kañha-beṁṇā.[44]

---

41 Rapson has read the legend on certain Āndhra coins as *Sakase* [*na*]*sa* He identifies the striker of the coins with Māḍhariputa-Svāmi-Sakasena of the Kānheri inscription. See *J. R. A. S.* for 1903, pp. 302 ff. ; *B. M. C.*, p. 10.

42 See Pl. VIII, Nos. 9 and 10.

43 *Annals of the Bhandarkar Institute*, Vol. I, pp. 31.

44 *Ep. Ind.*, Vol. XX, p. 79.

This plainly indicates that the kingdom of Sātakarṇi, who has been rightly identified with Sātakarṇi I, the husband of Nāyanikā, lay to the west of Kaliṅga, probably in Vidarbha. The Kṛishṇa-beṁṇā, to which Khāravela's army is said to have penetrated, is usually identified with the modern Kṛishṇā,[45] but this river flows south, not west, of Kaliṅga. There is, however, another Kṛishṇa-veṇā to which the description would suit admirably, *viz.*, the Kanhān, a tributary of the Wain-Gaṅgā, which flows about 10 miles north of Nagpur. From the topography of the *tīrthas* mentioned in the Vanaparvan of the *Mahābhārata*, Pargiter has shown that Kṛishṇa-veṇā was the old name of the Kanhān.[46] "In the list of the *tīrthas* mentioned in the Mahābhārata (Vana Parva, lxxxv, 8176—8185)," says he, "the pilgrim's course is arranged thus along the Godāvarī to its junction with the Veṇā (the modern Wain-Gaṅgā), northwards to the junction of the Varadā (Wardhā) with the Veṇā, then to the two places called Brahma-sthāna and Kuśa-plavana (which must have been situated along or near the course of the Veṇā), to the forest Devahrada, which is at the source of the river Kṛishṇa-veṇā. The Kṛishṇa-veṇā, which is mentioned often in connection with the Veṇā or Su-Veṇā (Vana Parva, clxxxix, 12,909 and Bhīshma Parva, IX, 335), appears probably to be a tributary of the Veṇā which flows north of Nagpur."[47] The pilgrim is next advised to go to the Payoshṇī (modern Pūrṇā) and then to the hermitage of Śarabhaṅga. From the *Rāmāyana*[48] we learn that this hermitage was situated in the Daṇḍakāraṇya, far away to the north of the Godāvarī.[49] The Kṛishṇa-veṇā, therefore, flowed north, not south, of the Godāvarī and cannot be identified with the well-known river Kṛishṇā. The Sātavāhanas were, therefore, ruling over ancient Vidarbha in the time of Khāravela.

There is another piece of evidence which points to the same conclusion. In the Nasik inscription No. 4, Gautamīputra-Sātakarṇi is called *Benākaṭaka-svāmī*, the lord of Benākaṭa.[50] No satisfactory explanation of this expression has been given so far. That the Beṇā or Veṇā was an ancient name of the Wain-Gaṅgā was, indeed, known and it was also noticed that the Siwani plates of the Vākāṭaka Pravarasena II mention a territorial division

---

45 *Ibid.*, Vol. XX, p. 83.

46 In the Deoli plates of the Rāshṭrakūṭa king, Kṛishṇa III, this river is called Kanhanā. *Ep. Ind.*, Vol. V, p. 196.

47 *J. R. A. S.*, for 1894, p. 244.

48 *Rāmāyaṇa*, (Bombay ed.) Araṇyakāṇḍa, cantos 4ff.

49 Pargiter places it on the northern slope of the Vindhya mountain, somewhere in the Bhopal State.

50 Benākaṭa is apparently mentioned in two other places, viz., ll. 12 and 14 in Nasik inscription No. 3, but the readings are not free from doubt. See *Bom. Gaz.*, Nasik District, p. 556 and *Ep. Ind.*, Vol. VIII, p. 65-66, notes 5 and 42.

named Beṇṇā-kārpara-bhāga.[51] But no place or territorial division exactly corresponding to Benā-kaṭaka was noticed elsewhere. Senart was, therefore, obliged to remark, while editing the Nasik inscriptions of the Sātavāhanas, that "we know nothing about Benā-kaṭaka."[52] Fortunately, the necessary evidence for the identification has now become available. The Tiroḍi plates[53], which were discovered about six years ago in the Bālāghāṭ District of the Central Provinces, record the grant, by the Vākāṭaka Pravarasena II, of the village Kośambakhaṇḍa situated in the western division (*apara-paṭṭa*) of Bennākaṭa. This village I have shown elsewhere[54] to be identical with Kosambā, in the Bhaṇḍārā District, about 6 miles to the south-west of Tiroḍi. Bennākaṭa, in which it was situated, was evidently a district comprising the territory on both the banks of the Wain-Gaṅgā.[55] In ancient times the names of large territorial divisions often ended in *kaṭa* or *kaṭaka*. Notice, for instance, Karahākaṭaka,[56] Bhojakaṭa,[57] Tālākaṭa,[58] Nāṅgara (Māṅgara?) kaṭaka[59] etc. The *Mahābhārata* also mentions Veṇākaṭa among the countries conquered by Sahadeva.[60] It is named in connection with Kośala or Chhattisgarh. Beṇākaṭa or Veṇākaṭa was, therefore, an ancient country which was the home-province of the Sātavāhanas. When Gautamīputra defeated Nahapāna (or his descendants) and annexed his wide dominions, he must have removed his capital to Pratishṭhāna (modern Paiṭhaṇ in the Nizam's State), which was more centrally situated. It is well known that Ptolemy mentions Siri-Puḷumāvi (Vāsishṭhīputra) as ruling at Paiṭhaṇ.

At a later stage of their history, the Sātavahanas seem to have moved still further to the south and settled in the modern Bellary District, which came to be named after them as Sātavāhanihāra[61] or Sātāhani-raṭṭha.[62]

---

51 Fleet, *Gupta Inscriptions*, p. 246

52 *Ep. Ind.*, Vol. VIII, p. 72.

53 *Ibid.*, Vol. XXII, pp. 167 ff.

54 *Loc. cit.*, p. 170.

55 The villages mentioned in the Siwani plates as situated in the Beṇṇā-kārpara-bhāga can also be satisfactorily identified in the Bhaṇḍārā District. See *ibid.*, Vol. XXII, p. 171, n. 1.

56 See inscription No. 18 in the Kuḍā Caves, *A. S. W. I.*, Vol. IV, p. 87 and n. 4.

57 Fleet, *Gupta Inscriptions*, p. 237.

58 *Mahābhārata*, (Bombay ed.), Sabhāparvan, Adhyāya 31, v. 65.

59 *New Ind. Ant.*, Vol. II, p. 180.

60 Sabhāparvan, Adhyāya 31, v. 12. The usual reading is Veṇātaṭa which seems to have been substituted for the original Veṇākaṭa, when the meaning of *kaṭa* was forgotten. It is noteworthy that the reading Veṇākaṭa also is met with in some Grantha MSS .of the *Mahābhārta*. See *Ep. Ind.*, Vol. XXII, p. 170, n. 6.

61 *Ep. Ind.*, Vol. XIV, p. 155.

62 *Ibid.*, Vol. I, p. 6.

A HOARD OF KAUSAMBI COINS FROM FATEHPUR.

By Dr. Motichandra, M.A., Ph. D.
Prince of Wales Museum, Bombay.

[Plate IX.]

The history of India from 2nd century A.D. to the beginning of the 4th century A.D. still remains largely unexplored. Dr. Jayaswal in his commendable work, *History of India, 150 A.D. to 350 A.D.*, has thrown considerable light on this dark period of Indian history, though at times he has based his arguments on thin grounds. Thus, he holds that Bhīmasena of Giñjā inscription (dated in the year 52 of some unknown era,) Mahārāja Śivamagha of a seal from Bhīṭā, and Mahārāja Bhadramagha were governors of the Vākāṭakas.[1] He arrived at this conclusion because he assumes that the Giñjā inscription of the year 52 is dated in the Chedi era. However, since the publication of his book many other inscriptions have been published, which throw some new light on the dynasty to which Bhadramagha and Śivamagha and a few other kings belonged. Recently a hoard was found in Fatehpur district and handed over to me for examination. It contains the coins of Śivamagha, Bhadramagha, Vaiśravaṇa and Bhīmavarman. This find contradicts the theory of the late R. B. D. R. Sahni that Śivamagha and Bhadramagha were the governors of the Guptas, as also that of Dr. Jayaswal that they were the governors of the Vākāṭakas, their inscriptions being dated in Chedi era. If the first supposition is correct, and the dates are to be referred to the Gupta era, then the reigns of King Bhadramagha whose earliest inscription is dated 81, and that of King Bhīmavarman whose latest inscription is dated 139, will have to be placed in the first half of the 5th century A.D. when Gupta power was very firmly established over Kauśāmbī. Gupta feudatories, however, though permitted to use the title *Mahārāja*, are not known to have enjoyed the privilege of issuing coinage. They also usually refer in their inscriptions to their feudal lords. The Magha rulers of Kauśāmbī, however, do not refer to the Guptas in their records and issue a copper coinage showing no points of contact with the copper coin types of the Guptas. They would therefore probably have to be placed in the pre-Gupta epoch. The probability is, as Sir J. Marshall has remarked while describing the seal of Śivamagha found at Bhīṭā,[2] that Śivamagha probably flourished in

---

1 Jayaswal, *History of India*, 150 A.D. to 350 A.D., pp. 229-231

2 *A. S. I., Ann. Rep.*, 1911-12, p. 41.

the 2nd or 3rd century A. D. Dr. Sten Konow[3] has also supported this view, and if it be correct, then it could be said with some degree of certainty that the inscriptions are dated in the Śaka era, and the dynasty probably may be counted as one of the numerous dynasties which rose to power after the downfall of the Kushānas.

The coins numbering 287, which were given to me for examination by Mr. Murarilal Kedia, a keen collector and founder of the Ramratana Pustak Bhavan, Nandan Sahu Lane, Benares City, represent merely a part of a much greater hoard discovered by a gentleman while digging a trench in his field in the village of Sāton (Haswā) in Fatehpur district. In common with the fate of so many other hoards, the major part of the hoard was at once rushed to the goldsmith to be melted down under the impression that the coins contained a good percentage of silver and gold. But when it was found out that the coins contained copper only, the remaining portion was dumped in a corner of the house and forgotten till Mr. Kedia rescued them.[4]

About the antiquity and archæological importance of the village Sāton, nothing is known except that a few small and big images of Mahishāsuramardinī of late medieval period were found from the village and were removed to the premises of the Fatehpur District Court. The small decaying town of Haswā, seven miles south-east of the headquarters, was perhaps originally named Champāvatī. According to the traditions Haṁsadhvaja, Mayūradhvaja, and Śaṅkhadhvaja settled there. Haṁsadhvaja changed the name of the city to Hamsapur, the corrupt form of which is Haswā. There are no ancient remains in the place except a ruined fort in the centre of the town.[5]

Out of two hundred and eighty-seven coins sent to me for examination, one hundred and eight coins, when cleaned, were found to be in fragmentary condition. Out of the remaining, one hundred and four coins were of Śivamagha, out of which eighteen were good specimens and have been dealt with here; sixty-four could be assigned to Vaiśravaṇa, out of which eleven good examples were chosen; nine coins could be assigned to Bhīmavarman, and only two to Bhadramagha. . The metal used is copper.

The legend on the reverse of the coins of Śivamagha is complete on three coins (Nos. 3, 4 and 5) and incomplete in the rest, under-

---

3 *Ep. Ind.*, Vol. XXIII, p. 247.

4 A similar hoard of Magha coins was found near the village Orhā, Bāndā District, U.P., three coins from which were presented by the Government of U.P. to the Bombay Branch of the Royal Asiatic Society. No record of this hoard, however, could be traced in the records of the Provincial Museum, Lucknow.

5 Führer, *Archaeological Survey List, N. W. Provinces*, p. 161.

lined by a ladder-like design[6] which has remained in some coins and disappeared from the others. The following types may be distinguished :—

I. Nos. 3-5. On the obverse the bull faces to the right ; on the reverse there is inscription underlined by the ladder. The legend on all the three specimens is complete. (Pl. IX, 3.)

II. Nos. 6-8. On the obverse the bull faces to the right ; on the reverse there is the tree in railing on the left ; ⋒ on the right, with the legend below underlined with the ladder (No. 7), which has disappeared from others. (Pl. IX, 4.)

III. Nos. 9-11. On the obverse the bull faces to the right ; on the reverse tree in the railing is on the right and ⋒ on the left.

IV. Nos. 12-13. On the obverse bull facing right, with ⊕ at the top, and on the reverse tree in railing is on the left, and ⋒ on the right. (Pl. IX, 5.)

V. No. 14. The same as Type IV except that the order of the symbols on the reverse is changed.

VI. No. 15. On the obverse there is the bull standing to the right, with ⊕ below ; on the reverse the tree in railing is on the left and ⋒ on the right.

VII. No. 16. On the reverse ⋒ is on the left, and tree in railing and ʃ on the right.

VIII. No. 17. On the obverse bull facing right ; on the reverse ʃ and tree in railing, to the left.

IX. Nos. 18-19. Restruck symbols on obverse ; the symbols on the reverse the same as in Type VII.

X. No. 20. Restruck symbols on the obverse ; on the reverse the same symbols as in Type VII.

Śivamagha or Śivamegha, as Sir John Marshall proposes to read, is known from a Bhīṭā seal which Sir John Marshall assigns to the second or third century A.D.[7], and the late Dr. Jayaswal to the fourth century A.D.[8] The seal is oval in shape measuring $1\frac{1}{4}'' \times 1''$, with standing figure of bull on the left; crescent under his neck ; a woman standing in front; her right hand outstretched, and the left one on hip. Behind the bull there is a post or thunder-bolt (*Vajra*). In exergue, bow with arrow and pile of balls as in Āndhra coins. Across the middle of the field there is a legend in northern

---

6 This sign also occurs on the coins of Sudeva, Bṛhaspatimitrā I (Allan, *A Cat. of the Ind. Coins in the Br. Mus.*, p. 150), and also on the coins of Dhandeva (*ibid.*, p. 153, Pl. XX, 12).

7 *A. S. I., Ann. Rep.*, 1911-12, p. 51.

8 *J. B. O. R. S.*, Vol. XIX, p. 297.

characters of about second or third century A.D. which reads :—"*Mahārāja Gautamīputrasya Śivamaghasya.*"[9] This seal was discovered in the debris accumulated above the floor of the building 7, belonging to the Maurya period. The other antiquities from the debris in which this sealing was found, however, belong to the Kushāṇa period.[10]

Now archæologically, it is manifest from the IV stratum of the House of Nāgadeva, the antiquities of which belong to the Kushāna period, that the site was evacuated in haphazard fashion due to some attack.[11] The second evacuation of the same house, which was built three feet above the original level at the end of the third century, took place during the early Gupta period. That the evacuation was due to violent enemy attack is proved from many missiles, such as catapult and sling balls found in the lanes, and from the charred remains of the houses.[12] Jayaswal assigns the first evacuation of the city to the Bhāraśiva invasion, and second to the invasion of Samudra Gupta.[13] No coins of Bhāraśivas have been found. Jayaswal, however, entertained the possibility of such coins being found in the large number of "anonymous" Kauśāmbi coins hitherto unpublished.[14] But if Śivamagha and other kings of the same dynasty reigned over Kauśāmbī and the neighbouring country in the later Kushāna period, then the theory falls flat. There are some interesting double struck coins of Śivamagha, though the overstruck symbols are not clear. Do these coins represent the attack and conquest of Śivamagha by some unknown enemy ?

It is significant to note in this connection the seal of Rājā Bhīmasena from Building No. 7 (floor level in Block No. 13 marked on the plan of the site). The seal is circular in shape, its diameter being $1\frac{1}{4}''$. The scenes and symbols are the same as on the seal of Śivamagha, but transposed. The legend is also in similar characters and reads :—

"*(Rā) jña Vāsasu (Vāṣiṣhṭhi)putraysa Śri-Bhīmasenasya.*"[15] This Bhīmasena has been identified by Dr. Jayaswal with the Mahārāja Bhīmasena of the Giñjā inscription of the year 52[16] Mr. Amalanda Ghosh, however, rejects this identification on the ground that their titles are different.[17] This argument, however, does not hold much water. He might have been in the beginning of his

---

9 *A. S. I., Ann. Rep*., 1911-12, p. 41.
10 *Ib.*, p. 32.
11 *Ib.*, 1911-12, p. 34.
12 *Ib.* p. 34.
13 Jayaswal, *loc. cit.*, pp. 224-225.
14 *Ib.* p. 224.
15 *A. S. R., Ann. Rep.*, 1911-12, p. 51.
16 Jayaswal, *loc. cit.*, p. 231 ; for Giñjā inscription see **Luder's List, No. 906.**
17 *Indian Culture*, July, 1936, p. 179.

career a humble feudatory chief, but later on he may have shaken off his yoke and styled himself as Mahārāja. The sameness of the symbols on the seals of Śivamagha and Bhīmasena establishes close relationship between the two, and if Śivamagha could be placed in the second or third century, Mahārāja Bhīmasena's inscription of the year 52 could also be dated in the Śaka era. Whether he had completely shaken off the suzerainty of the Kushāṇas and made himself independent, or he had kept up some show of his allegiance even after assuming the title of Mahārāja, it is difficult to say. Bhīmasena who assumed the title of Mahārāja had his immediate successors as Poṭhasiri and Bhada or Bhaṭadeva.[18] Śivamagha who calls himself Mahārāja both in his inscription[19] and on his coins, probably succeeded after those two princes had to contend with other forces, and hence the destruction of Sahajāti and restriking of his coins. This, however, must remain a conjecture, till some dated inscription of Śivamagha or some other evidence comes to light. Between the inscription of the year 52 of Bhīmasena and the inscription of the year 87 of Bhadramagha, to be described presently, there is a lacuna of 35 years,[20] and between the inscription of Vaiśravaṇa dated 107 and that of Bhīmavarman dated 130, there is a lacuna of 23 years. In any case Śivamagha and another ruler Jayama (gha)[21] should probably fit in either lacuna. There might have been other kings about whom we do not know anything in the present state of our knowledge.

In the whole lot only two coins of Bhadramagha (Nos. 1-2, Pl. XI, 1-2) were found. On the obverse of No. 1 there is the bull facing to the right, and on the reverse the symbols on left, tree in railing on right and a ladder-like design at the bottom are represented. Mr. Allan[22] has also described two coins of Bhadramagha with partial legends—*dramagha* under the heading of "Coins with Incomplete Legends" in a subsection describing Kauśāmbī coins.

18 For this information I am indebted to Dr. N. P. Chakravarti, the Government Epigraphist for India. In a letter he observes :—"The inscriptions I have found out at Rewā range in dates from the year 51 to the year 90. They mention Mahārāja Bhīmasena and his two successors Poṭhasiri and Bhada or Bhaṭadeva." It is interesting to note in this connection a coin from Bhīṭā, the legend on the obverse of which has been read as Prashṭhaśriya (*A.S.I., Ann., Rep.* 1911-12, p. 66). The tree in railing and three arched *chaityas* to left on the obverse, and humped bull facing to the right on the reverse are the same as found on Magha coins. This Prasṭha-Śriya may be identified with Poṭhasiri, and the coin is a further proof that he belonged to the Magha Dynasty.

19 *Ep. Ind.*, Vol. XVIII, pp. 159-160.

20 This lacuna is further reduced by six years, since an inscription of the year 81 of Bhadramagha is published by Mr. Krishna Deva in *Ep. Ind.*, Vol. XXIV, part VI.

21 Allan, *A Catalogue of the Indian Coins in the Br. Museum*, p. 157.

22 *Ib.*, p. 158.

Two inscriptions of Bhadramagha, now in the Allahabad Municipal Museum[23], are identical in purpose, and record the setting up of two slabs as a seat at a pond for the Holy Noble Devī by the son and daughter of Saphara and the son and daughter of Madgali Śanikā and Shaṇḍhaka.[24] The slabs according to Sten Konow were intended to form a seat for an image of the Devī.

Sten Konow is of opinion that the inscription of Bhadramagha numbered III in Sahni's article[25] is the same as No. (*a*) of his inscriptions except with slight changes. This has been explained by Sten Konow as due to some serious slips of the engraver, hence the inscription III edited by Sahni was discarded and a fresh one substituted.[26] Both the inscriptions are dated in the year 87.[27] Sahani however reads the date in his inscription as 88, and Jayaswal as 86.[28] Sten Konow agreeing with Marshall places the year 87 in Kanishka era[29]; Mr. Chatterji gives strong reasons[30] for assigning these inscriptions to the Kushāṇa period. Jayaswal however places the record in Chedi era (=334 A.D. according to his reading of 86)[31] and Sahni places the record in Gupta era (=407 A.D. according to his reading of 88). The protagonists of the Chedi era base their arguments on palæographic peculiarities of some letters which resemble early Gupta characters. This question we shall discuss when we come to the question of the script used on the coins. It would be sufficient to say here that no hard and fast rule could be propounded to distinguish the later Kushāṇa and the early Gupta script.

There were 62 coins of Vaiśravaṇa in the hoard, out of which 36 had partial and obliterated legends. The following types may be distinguished :—

I. No. 21. On the obverse the bull facing to the right ; on the reverse tree in railing to the right; 𑀫 on the left; ladder below, complete legend. (Pl. IX, 6.)

II. No. 22. The order of the symbols on the reverse is changed.

III. No. 23. On the obverse the bull facing to the right with ⊕ on top left ; the symbols on the reverse the same as in Type II. (Pl. IX, 7.)

---

23 *Ep. Ind.*, Vol. XXIII, pp. 245-248 : also edited by G. S. Chatterji in the *Jha Commemoration Volume*, Two inscriptions from Kosam, pp. 100-114.

24 *Ep. Ind.*, Vol. XXIII, p. 246.

25 *Ep. Ind.*, Vol. XVIII, pp. 159-160.

26 *Ep. Ind.*, Vol. XXIII, p. 247.

27 *Ib.*, Chatterji, *loc. cit.*, p. 109.

28 Jayaswal, *loc. cit.*, p. 231.

29 *Ep. Ind.*, Vol. XXIII, p. 247.

30 *Loc. cit.*, pp. 104-109.

31 Jayaswal, *loc. cit.*, p. 231.

7146

IV. No. 24. On the obverse bull facing to the right; on the reverse ʃ and tree in railing on the left.

V. Nos. 25-26. On the obverse bull facing to the right; on the reverse tree in railing to the left; ⋒ and ʃ on right. (Pl. IX, 8.)

VI. No. 27. On the obverse bull facing to the right with ⊕ at top left; the symbols on the reverse are the same as in Type V.

VII. Nos. 28-29. On the obverse the bull facing to the left; on the reverse the ladder below.

VIII. No. 30. On the reverse ↑ on the left; tree in railing to the right.

IX. No. 31. On the obverse bull facing to the right; on the reverse ʃ on the left; tree in railing on the right.

Vaiśravaṇa, under the titles of Rājan and Mahārāja, is also known from the inscriptions. Majumdar has edited the inscription of Vaiśravaṇa of the year 107.[32] The inscription is engraved on a pillar and was discovered by Mr. Majumdar in 1938 from Kosam. The purpose of this inscription is to record the establishment of a stone umbrella in honour of Buddha by the merchant Māgha, the inhabitant of Śuktimatī. The umbrella was established within a temple called Pūrvasiddhāyatana in Badarikārāma. The inscription refers itself to the reign of Mahārāja Vaiśravaṇa and is dated in the year 107, the first day of the seventh fortnight of the summer.[33] Majumdar, on palæological grounds, assigns this inscription to the fourth century A.D.,[34] and places it in the same group as the Giñjā inscription of Bhīmasena, and the Kosam inscriptions of Śivamagha, Bhadramagha and Bhīmavarman, the dates of which range between the years 51 and 139 of some unspecified era.

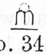
In Rewā two short inscriptions of Vaiśravaṇa were found by Dr. Chakravarti which have not yet been published by him. In a communication on this subject he writes to me: "I found two small inscriptions of Vaiśravaṇa at Bāndhogaṛh in the Rewā State. They are not dated, and each records the construction of a cave by the Rājan Vaiśravaṇa mentioned in the records as the son of the Mahāsenāpati Bhadrabāla." In the Kosam inscription of Vaiśravaṇa of the year 107, however, he is called Mahārāja and his father's name is not given. These inscriptions throw some light on Vaiśravaṇa. Firstly, we know that during the lifetime of his father he was a Rājan or governor, and afterwards assumed the title of Mahārāja. Another point which attracts our attention is the affinity

---

32 *Ep. Ind.*, Vol. XXIV, pp. 146-148.
33 *Ib.*, p. 147.
34 *Ib.*, p. 146.

between the name of Vaiśravaṇa's father Bhadrabāla and Bhadramagha whose inscriptions of the year 87 were found at Kosam. The difference between the inscriptions of Bhadramagha and Vaiśravaṇa is only of twenty years, and it is quite probable that the latter succeeded the former between these years. The continuation of the same symbols on the coins of Bhadramagha and Vaiśravaṇa also suggests very close relation between the two. An objection however may be raised about the different official status of Bhadramagha and Bhadrabāla. Bhadramagha is addressed as Mahārāja in the Kosam inscriptions, while Bhadrabāla of the Rewa inscription styles himself as Mahāsenāpati only. But this objection is not a serious one as Fleet has already observed; the title of Mahāsenāpati, "Great Lord of the Army," seems to have denoted equal rank with the Mahārāja and Mahāsāmanta.[35] This title is coupled with that of Mahārāja in the fragmentary Bijayagaḍh inscription of the Yaudheyas[36] assigned to the Kushāna period[37] and also in the Wālā clay seal of Pusheyṇa.[38] It seems possible that in the stormy days of the later Kushāna period the king also assumed the function of the Field Marshal for the better conduct of war. Another objection may be taken against the difference between the second half of the name; in Rewa inscriptions it is *bāla* and in Kosam inscriptions *magha*. Magha, however, may be a dynastic name and Bhadrabāla his full name. This point, however, requires further elucidation before a final judgment can be pronounced on the identity of Bhadrabāla with Bhadramagha.

Out of the whole lot only eight coins of Bhīmavaraman were found. All of them, however, have partial legends.

I. Nos. 32-33. On the obverse the bull facing to the left with ⊕ at the top; on the reverse tree in railing to the left;  on the right.

II. No. 34. Obverse the same as in Type I. The order of the symbols on the reverse is changed.

III. No. 35. On the obverse bull facing to the right with ⊕ at the top; on the reverse tree in railing to the left; ladder below.

IV. Nos. 36-37. On the obverse bull facing to the left; on the reverse tree in railing to the right.

Two inscriptions of Mahārāja Bhīmavarman have been discovered. The one found at Kauśāmbī by Cunningham[39] is dated

35 Fleet, *Gupta Inscriptions*, p. 15, foot-note 4.
36 *Ib.*, p. 252.
37 *Ib.*, p. 251.
38 *Ind. Ant.*, Vol. XII, p. 274f.
39 *A. S. R.*, Vol. X., p. 3. Pl. II (3).

139. On palæological grounds Fleet places this in Gupta era and concludes that this Bhīmavarman must have been a feudatory of Skanda Gupta.[40] Bhandarkar places the inscription in the Kalachūri era and dates it in the second half of the 4th century A.D.[41]

The second inscription of Bhīmavarman of the year 130 found at Kosam is in the Allahabad Museum. It gives the year 130 and the name of Mahārāja Bhīmavarman.[42] Mr. Ghosh, however, basing his arguments on palæographical grounds differentiates between Bhīmavarman of Cunningham's inscription, dated 139, and Bhīmavarman of Allahabad Museum inscription.[43] Bhīmavarman of Cunningham's inscription he places in the Gupta era, calling him Bhīmavarman II, and Bhīmavarman of Allahabad Museum inscription he places in the Chedi era calling him Bhīmavarman I. How much truth there is in his statement it is for palæographists to decide.

The majority of scholars in favour of the Chedi era of the inscriptions of Bhadramagha, Vaiśravaṇa and Bhīmavarman base their arguments on palæography, which they say is of early Gupta type, though very few have taken into account the thin partition which divides the early Gupta and Kushāṇa palæography. No less an authority than Dr. Bhandarkar holds the same view, according to whom there is no hard and fast distinction between the Kushāṇa and the Gupta scripts.[44] It is well known that in the inscription Kanishka of the year 14 everywhere the letter *ma* has the advanced form of the Gupta period, and *ha* also assumes the peculiar form of *ha* in the eastern variety of the Gupta Script.[45] Therefore the script alone cannot be taken as the surest guide in determining dates. In the case of the coins under examination, however, even palæographically they can be easily assigned to late Kushāna period.

(1) The form of *gha* may be described as capital E lying flat. In the early Kushāṇa inscriptions, however, the left vertical stroke is inclined a little inward at the top.[46] *Gha* in the coins resembles *gha* in Samudra Gupta's Allahabad Pillar inscription, with the difference that whereas in the latter the base line of *gha* is slightly curved[47] the base line of *gha* in our coins is straight. This form may represent the transitional stage between the early Kushāṇa and the Gupta form.

---

40 Fleet, *Gupta Inscriptions*, No. 65, Pl. XXXIX (c).

41 *List of Northern Inscriptions*, p. 173, n. 3.

42 Ghosh, Kosam Stone Image Inscription of Mahārāja Bhīmavarman in *Indian Culture*, July 1936, p. 177.

43 *Ib.*, pp. 178-179.

44 *Ep. Ind.*, Vol. XXI, p. 2.

45 *Ep. Ind.*, Vol. XIX, p. 96.

46 Ojha, *Bhāratīya Prācīna—lipi-mālā*, Pl. VI.

47 *Ib.*, Pl. XVI.

(2) The form of *ṇa* made up of two slightly curved hook-like verticals joined back to back with slightly curved or straight base line met in the coins is practically absent in the Gupta inscriptions. It seems to be the development of two types to be met in the early Kushāna inscriptions. The first may be called X type.[48] The second type which is much more common is made up of two slightly curved horizontal lines with a thin line joining them in the middle.[49]

(3) *Bha* in the coins of Bhīmavarman with two recurved lines, one vertical and the other horizontal, is the same as in the Kushāṇa script.[50]

(4) The form of *ma* in the coins of Śivamagha, Bhadramagha and Bhīmavarman is decidedly Kushāṇa. It is in the form of an equilateral triangle with its two arms prolonged upwards, which is the regular form of Kushāṇa *ma*.[51]

(5) *Śa* occurring in Śivamagha and Vaiśravaṇa is of Kushāṇa type, as its verticals are equal and the looped head is also not so broad as in the Gupta *śa* which has its right leg prolonged downwards, and even if there is no such prolongation the head is broad and flat as in 1.1 of the Gaḍhwā inscription of the Gupta year 148.[52]

Coming to the medial vowel signs, short *i* in *śi* is formed by a curved stroke going upwards, starting from the right end of the horizontal line which divides the loop of the *śa*, as in the Kushāṇa *thi* and *ṇi* in some other inscriptions[53]; long *ī* in Bhīma is represented by a full curve at the top of *bha* in the same way as *ī* in *vī* in Kushāṇa inscriptions.[54]

The nearest approach to the symbols on the coins under discussion are found on the coins of Parvata, on the obverse of which a bull stands facing right, and on the reverse there are , tree in railing and a recurved line.[55] What connection, however, our king bore to Parvata, a king of the 2nd century B. C., it is difficult to say.

---

48 Buhler, Mathura Inscription, No. 18, *Ep. Ind.*, Vol. II, Plate facing p. 204 No. 18, 1.4

49 Ojha, *loc. cit.*, Pl. VI.

50 *Ib.*

51 *Ib.*

52 Fleet, *Gupta Inscriptions*, No. 66, Pl. XXXIX(d

53 Ohja, *loc. cit.*, Pl. VI.

54 *Ib.*

55 Allan, *loc. cit.*, p. 150.

LIST OF THE COINS

No.	Wt. (In grains)	Size. (In inches)	Metal Æ Obverse.	Reverse.
			BHADRAMAGHA	
1	68·5	·6×·75	Bull r.	[symbol] ; tree in railing r. ; ladder below; *Bhadra-ma ;* Pl. IX, 1.
2	60·0	·6×·65	Worn out.	*Bhadaama—* ; Pl. IX, 2.
			ŚIVAMAGHA	
			TYPE I.	
3	42·5	·55×·75	Bull r.	Traces of ladder below ; *Śivamagha ;* Pl. IX, 3.
4	45·5	·55×·6	Bull r.	Ladder below ; *Śiva-magha.*
5	46·5	·5×·6	Bull r.	Ladder below ; *Śiva-magha.*
			TYPE II.	
6	45·5	·6×·65	Worn out.	Tree in railing l. ; [symbol] r. ; *Śivama.*
7	51·5	·55×·55	Bull r.	Tree in railing l. ; [symbol] ladder below ; *Śivama.*
8	45·5	·55×·65		Tree in railing l. ;—*va-magha.* Pl. IX, 4.
			TYPE III.	
9	49·0	·6×·55	Bull r.	[symbol] l.; tree in railing r.; —*Śivama.*
10	52·5	·5×·6	Worn out.	Tree in railing r. ; [symbol] l. ; —*vamagha.*
11	47·5	·6×·65	Worn out.	[symbol] l. ; tree in railing r.; *Śivama—.*
			TYPE IV.	
12	48·5	·6×·65	Bull r.; ⊕ top centre.	Tree in railing l. ; [symbol] r.;—*vama—.* Pl. IX, 5.
13	48·5	·55×·7	⊕ top centre.	Ladder below; -*vama*-.

LIST OF THE COINS

No.	Wt. (In grains)	Size (In inches)	Metal Æ Obverse.	Reverse.
			TYPE V.	
14	45·0	·55×·6	Bull r.; ⊕ top.	⋒ top l.; tree in railing r.; ladder below; *Śivama*—.
			TYPE VI.	
15	45·0	·6×·6	Bull r.; ⊕ below.	Tree in railing l.; traces of ⋒ r.; -*vama*-.
			TYPE VII.	
16	44·5	·65×·65	Worn out.	l. ⋒; tree in railing and ʃ, -*vama*-.
			TYPE VIII.	
17	54·5	·6×·7	Bull r.	ʃ and tree in railing; *Śivama*—.
			TYPE IX.	
18	58·0	·5×·5	Restruck symbols illegible.	Tree in railing l.; -*vama*-.
19	56·0	·55×·6	Restruck symbols.	Tree in railing l.; -*vama*-.
			TYPE X.	
20	42·0	·6×·55	Restruck symbols illegible.	⋒ l.; tree in railing and ʃ r.; -*vama*.-

VAIŚRAVAṆA.

No.	Wt.	Size	Obverse.	Reverse.
			TYPE I.	
21	48·0	·55×·65	Bull r.	Traces of tree in railing r.; ⋒ l.; ladder below; *Vaiśravana*; Pl. IX, 6.

LIST OF THE COINS

No.	Wt. (In grains)	Size (In inches)	Metal Æ Obverse	Reverse.
			Type II.	
22	55·0	·55×·6	Bull r.	Traces of tree in railing l.; ⋒ r.; -śravaṇa.
			Type III.	
23	47·0	·55×·55	Bull r.; ⊕ top l. corner.	Traces of tree in railing l.; ⋒ r.; ladder below; Vaiśravaṇa. Pl. IX, 7.
			Type IV.	
24	46·0	·6×·6	Bull r.	ʃ and tree in railing l.; Vaiśra.
			Type V.	
25	55·0	·6×·65	Bull r.	Tree in railing l.; ⋒ and ʃ r.; -śravaṇa; Pl. IX, 8.
26	54·5	·6×·7	Bull r.	Tree in railing l; ⋒ ʃ r.; -vana-.
			Type VI.	
27	43·5	·55×·6	Bull r; ⊕ top l. corner.	Tree in railing l.; ⋒ and ʃ r.; -vaṇa.
			Type VII.	
28	44·5	·55×·6	Bull l.	Ladder below; Vaiśrava.
29	64·0	·55×·7	Bull l.	Ladder below; -śravaṇa.
			Type VIII.	
30	47·0	·55×·6	Worn out.	↑ l.; tree in railing r..

LIST OF THE COINS

No.	Wt. (In grains)	Size (In inches)	Metal Æ Obverse	Reverse.
			TYPE IX.	
31	53·0	·5×·6	Bull r.	ʃ l.; tree in railing r; *Vaiśra-*.
			BHĪMAVARMAN	
			TYPE I.	
32	56·0	·6×·6	Bull l.; ⊕ top.	Tree in railing l.; [symbol] r.; Bhīmavarma-.
33	53·0	·5×·75	Bull l.; ⊕ top.	Tree in railing l.; [symbol] *-Bhīmava*.
			TYPE II.	
34	56·0	·55×·65	Bull l.; ⊕ top.	Tree in railing r.; l.; *-mava-*.
			TYPE III.	
35	45·5	·65×·7	Bull r.; ⊕ top.	Traces of tree in railing l.; ladder below; *-mavama*; Pl. IX, 9.
			TYPE IV.	
36	44·0	·55×·6	Bull l.	Tree in railing r.; *Bhima-*.
37	54·4	·6×·6.	Bull l.	Tree in railing r.; *-mava-*.

A NEW HOARD OF YAUDHEYA COINS FROM DEHRA DUN DISTRICT.

By Rai Bahadur Prayag Dayal, Lucknow.

[Plate X.]

Among tribal coins, those attributed to Yaudheyas are seldom found, and ever since the inception of the Coin Committee in the United Provinces in 1898, this is the first time that a hoard of this class of coins has come to light in the United Provinces.

As the name signifies, the Yaudheyas were a community of warriors inhabiting Eastern Punjab and holding sway over the whole of Northern Rajputana, Eastern Punjab, and Saharanpur and Dehra Dun districts in the United Provinces. They issued coins from about the 2nd century B.C. to the beginning of the 4th century A.D., when with the advent of the Guptas their currency came to an end.

All the types of their coins are fully described in the *Catalogue of the Coins of Ancient India* in the British Museum by Mr. J. Allan, published in 1936.

Fortunately synchronising with the year of the publication of this exhaustive work comes the discovery of an entire mint in the Punjab and of a hoard of coins in the United Provinces.

About a thousand moulds for casting copper coins were dug out by my esteemed friend Dr. B. Sahni, M.Sc., Sc.D., F.A.S.B., F.R.S., of Lucknow University at Khokra Kot, a mound on the outskirts of Rohtak in the Punjab. They are noticed in *Current Science*, Vol. IV, No. 11, for May 1936. These moulds are very interesting and illustrate the practical technique of the cast coinage.

Eight moulds were arranged on a disc round a central hole, obv. and rev. discs being prepared separately. The obverse and reverse discs were laid in piles in exact positions denoted by a line-mark on the edges and molten metal was poured into the central hole reaching sockets through the eight channels radiating from the central hole. The casts were then separated and finished with a file, if necessary. The coins of the Rohtak mint, manufactured in this way, bore the legend *Yaudheyānām bahudhāñake*, the latter portion of which had remained unread so far, and was deciphered by the late Dr. K. P. Jayaswal, the distinguished numismatist and scholar of Patna, who exhaustively dwelt on the history and coinage of the Yaudheyas in his Presidential address delivered at the Annual

Meeting of the Numismatic Society of India at Udaipur in November 1936. (*Vide* "Proceedings of the Annual Meeting of the Numismatic Society of India," 1936.)

I now proceed to examine the hoard of 164 copper coins discovered early in 1936. These were found in an earthen vessel by one Kalya of village Panjya, Khat Bana, in Jaunsar Bawar, Tahsil Chakrata of Dehra Dun district, while ploughing his field. The coins had a thick coating of verdigris and being in a bad state of preservation defied decipherment in the first attempt.

They have now been cleaned, classified and deciphered as far as possible. Taken as a whole, the lot represents specimens of the type treated in Class 3 of Allan's *Catalogue of the Coins of Ancient India* in the British Museum (p. 270). On their obverse, there is usually Kārtikeya ; the reverse shows a surprising variety in symbols, animals and deities which have been duly noted below. The coins belong to the later stage of Yaudheya history and may be assigned to the second century A.D.

There are small differences in size and fabric ; some of them have inscriptions in bold while others have in cursive Brāhmī characters showing signs of deterioration, but the types are similar, although symbols exchange places and positions. Some new symbols and animals constitute new varieties and they deserve to be noticed here.

No. 2-3 Obv.—Kārtikeya, six-headed, (the outer row of 5 heads has crests), standing facing, holding spear in r. hand and resting l. arm on hip.

Rev.—Goddess standing facing. Tree on r.

Weight 129 grs. Size ·95.″

Novelty.—The outer row of 5 heads is crested.

,, 4 Obv.—Kārtikeya, six-headed, (the upper row of 3 has crests), spear standing left.

Rev.—Goddess with radiate head, standing facing, with r. hand raised and l. hand resting on hip. *Chaitya* surmounted by *Triratna* on l. Tree on r.

Weight 92 grs. Size 1.″

Novelty.—The upper row of 3 heads is crested.

,, 8-9 Obv.—Kārtikeya standing with a vase in field on r.

Rev.—Goddess six-headed, (the outer row of 5 has crests), standing facing with r. hand raised and l. hand resting on hip. *Chaitya* on l. Tree on r. Pl. X

Weight 143 grs. Size 1″.

Novelty.—The outer row of 5 heads is crested on reverse.

No. 11 Obv.—Kārtikeya six-headed without crests, standing.
Rev.—Goddess. *Chaitya* on l. Tree on r. Circular mark below *Chaitya*.
Weight.—109 grs. Size ·95.″
Novelty.—Circular mark below *Chaitya*.

,, 12 Obv.—Kārtikeya six-headed without crests standing facing with r. hand raised towards spear and l. hand resting on hip. Pl. X.
Rev.—Śiva, three-headed, standing. *Chaitya* on l. Tree on r. Pl. X.
Weight.—153 grs. Size 1″
Novelty.—Śiva on reverse.

,, 16 Obv.—Kārtikeya standing on lotus with a vase in field on r. Inscription *Brahmanyadevasya*. Pl. X.
Rev.—Goddess standing on lotus. Tree on l. *Chaitya* on r.
Weight.—195 grs. Size 1.05″.
Novelty.—Kārtikeya and Goddess standing on lotus.

,, 19-20 Obv.—Kārtikeya standing facing, holding spear.
Rev.—Deer standing to r. Tree on r. *Chaitya* on l. Building above.
Weight.—114 grs. Size 1.05.″
Novelty.—Building above.

,, 25 Obv. Kārtikeya standing pointing with uplifted r. hand to a cock standard (?) Pl. X.
Rev.—Deer standing to r. Tree on r. *Chaitya* on l. Vase above.
Weight.—144 grs. Size ·9.″
Novelty.—Cock standard (?).

,, 46 Obv.—Kārtikeya six-headed with 6 crests standing, facing, with r. hand raised and l. resting on hip. Pl. X.
Rev.—Deer standing to r. Tree on l. *Chaitya* on r.
Weight.—96 grs. Size ·95.″
Novelty.—Kārtikeya six-headed with 6 crests.

,, 63 Obv.—Traces of Kārtikeya standing.
Rev.—Bull standing to r. Tree on r. *Chaitya* on l. Pl. X.
Weight.—107 grs. Size ·85.″
Novelty.—Bull in place of Deer.

No. 64 Obv.—Traces of Kārtikeya standing.
Rev.—Ass standing to r. on some round object. Tree on r. *Chaitya* on l. Pl. X.
Weight.—142 grs. Size ·9."
Novelty.—Ass in place of Deer.

,, 74 Obv.—Kārtikeya six-headed standing facing, holding spear in r. hand and resting l. arm on hip.
Rev.—Horse standing to r. Tree and *Chaitya* above. Pl. X.
Weight.—122 grs. Size ·95."
Novelty.—Horse (?) in place of Deer.

,, 85 Obv.—Śiva one headed standing facing, holding *Triśūla.*
Rev.—Deer standing to l. *Chaitya* on l.
Weight.—159 grs. Size ·9."
Novelty.—Śiva holding *Triśūla* in place of Kārtikeya.

,, 95 Obv.—Kārtikeya six-headed (having 6 crests) standing facing.
Rev.—Deer standing to r. before an incomplete building. Letters *darma* above deer.
Weight.—115 grs. Size 1."
Novelty.—Kārtikeya six-headed with 6 crests.

,, 96 Obv.—Traces of Kārtikeya.
Rev.—Deer standing to r. before building having a round base.
Weight.—115 grs. Size 1."
Novelty.—Base of building round.

,, 104 Obv.—Mutilated.
Rev.—Leopard standing to l.
Weight.—82 grs. Size ·9."
Novelty.—Leopard in place of Deer.

A NEW SILVER COIN OF HUVISHKA.

BY MR. M. B. L. DAR, B.SC., LL.B., P.C.S., ALMORA.

[Plate X-A. No. 7]

Metal—AR.

Weight—30 grains.

Size—Circular, about ·8″ in diameter. Bored at the top.

Obv.—Half length bust of king facing right, wearing coat of mail and round crown bound with fillet, holding the sceptre in his right hand and an elephant goad in his left. Halo round the face.

Rev.—Sun God facing left, rays issuing from a halo round the face. He wears chlamys. Right arm is outstretched, left hand at waist, touching short sword at side. symbol on left, inscription on the right. Pl. X-A, No. 7.

The coin considering the metal, is in a good state of preservation, but is unfortunately chipped off at one side, making the decipherment of the whole of the usual legend difficult.

The coin in my cabinet is unique in its rarity, for it is not only in silver but its obverse has a very rare bust of Huvishka. Silver coins of the Kushānas are but rarely met with.

[Stray silver coins of the Kushāṇas are sometimes found and some of them have been published. A silver coin of Wima Kadphises has been published by Gardner in his *Catalogue of the Coins of the Greek and Scythic Kings of Baktria and India*, Pl. XXV, No. 11. On its reverse there are two deities, Nano and Oesho, and it weighs 40 grains. A silver coin of Kanishka with Oesho on the reverse, is in the Indian Museum, Calcutta, and has been published in *A.R., A.S.I.* 1925-26, Pl. LX, f. Its weight has not been given. The Punjab Museum, Lahore, has a silver coin of Huvishka with Nana and Oesho on the reverse, and weighing almost as much as the present coin, i.e., 28 grains. (See *Catalogue*, Vol. I, p. 197, No. 135 and Pl. XVIII.) A coin of Huvishka, similar to that in the Punjab Museum, exists in the cabinet of the Bombay Branch of the Royal Asiatic Society and has been published by Mr. (now Rao Bahadur) K. N. Dikshit in that Society's Journal, Vol. XXIV, p. 384 and plate. On its reverse there are Nano and Oesho and its weight is 40 grains. Mr. Dar's coin would thus be the fifth silver Kushāṇa coin to be published.—EDITOR, A.S.A.]

SOME RARE PANCHALA COINS FROM THE SITE OF ANCIENT AHICHCHHATRA IN BAREILLY DISTRICT.

By Mr. M. B. L. Dar., B.Sc., LL.B., P.C.S., Almora.

[Plate X-A.]

The coins described below were obtained by me on the site of the ancient Ahichchhatra during the course of the year 1939.

VASUSENA.

I.

Metal—Æ. Weight—140 grains.

Size—Circular, ·9″ in diameter.

Obv.—The usual Pañchāla symbols on the top, with the king's name "VASUSENASA" below, in an incuse formed by the impression of a square die on a round coin.

Rev.—A spirited horse with bent neck and upturned tail.

Pl. X-A, No. 6

No effort has so far been made to establish the identity of the Śuṅga King Vasumitra or Sumitra, although numismatists have discussed the probability of Agnimitra of the Śunga dyṅasty being the same as the Pañchāla king of that name.

The figure of the spirited horse on the reverse recalls the scene in the *Mālvikāgnimitra* of Kālidāsa, in which a messenger comes to Agnimitra, Viceroy of Vidiśā, with a letter from Pushyamitra, his father, inviting him for the Aśvameda sacrifice, which was about to be started. The horse, which had been let loose according to custom for one year, as a challenge to all opponents, was guarded by prince Vasumitra, son of Agnimitra, attended by 100 other princes, and on the attempted capture of this horse by Yavanas the latter were defeated by Vasumitra or Sumitra.

The Aśvamedha is an ancient Hindu rite performed by powerful kings as a proof of "universal" conquest, and the duty of guarding the horse was regarded as a very great honour and privilege.

The successful guarding of the Aśvamedha horse must naturally have been regarded by Vasumitra, which is evidently another name for Vasusena, as the most remarkable event in his life, justifying its commemoration by the adoption on the reverse of his coins of a tell-tale symbol in the shape of a spirited horse. There are many examples of such symbols in numismatic history.

The donor of the Pabhosa cave, Āshādhasena, traces his descent from the king of Ahichchhatra. According to Dr. Jayaswal, the Pabhosa cave was built in the 10th year of the reign of Odraka, the 5th Śuṅga King and son of Vasumitra, who appears to be identical with Vasusena of the coins in my cabinet described above.

As far as I know, no coins of Odraka have so far been found, but the testimony of the Pabhosa inscription, tending to show the extent of the Śuṅga Empire as far as Kauśāmbi and Ahichchhatra, is confirmed by this coin.

This remarkable coin identifies one more king of the Śuṅga dynasty with a hitherto unknown Pañchāla king and provides one more proof of the suzerainty of the Śuṅgas over the N. Pañchāla kingdom, thereby filling up an important gap between Agnimitra on the one hand and Odraka on the other, and strengthening still more not only the theory that Agnimitra of the Pañchāla coin is identical with the Śuṅga king of that name, but that another Panchāla king Vasusena of this coin in my cabinet is no other than Vasumitra of the Śuṅga Dynasty.

II. TAGAPĀLA AND DAMAGUTA.

Æ. Weight—78 grains.

Size—Circular, ·7″ in diameter.

Obv.—Three symbols on the top with the king's name "TAGAPALASA" below in a small incuse formed by the impression of a square die on a round coin, partially obliterating a faint *chakra* symbol on the left, which now appears as .

Rev.—King's name "DAMAGUTASA" in a small oblong remnant of the incuse formed on the obverse ; the upper portion, which betrays the outline of the third Pañchāla symbol placed as a first symbol is countermarked with the symbol found on the reverse of the coins of Phalgunimitra. Pl. X-A, No. 5.

I am obliged to R. B. K. N. Dikshit, the Director General of Archæology in India, for helping me in deciphering the names of the two kings.

It is a unique coin in the sense that

(*a*) It mentions two hitherto unknown kings either in the Śuṅga or Pañchāla line ;

(*b*) the issue of one king has been counterstruck by another ;

(*c*) A symbol of *chakra* has so far not been known to appear on any of the Pañchāla coins, and

(*d*) the third one of the Pañchāla set of symbols has never before been known to appear as first.

III. UNINSCRIBED COIN.

Æ. cast. Weight—65 grains.

Size—1.1″× .5.″

Obv.—A pair of two circular discs joined together, with a diamond shaped surface of metal at the junction. Each disc has a raised border divided by vertical lines to give it an ornamental appearance. Within the border is an eight petalled *chakra* symbol with a flat plain knob in the centre, giving it the appearance of a lotus flower. One of the two circular discs has a join left in the casting process, still adhering to it at one end.

Rev.—Plain and flat.

The eight petalled symbol appears to have been popular with early coiners in Ahichchhatra, for we find a modification of the eight petalled symbol appearing in very small sizes over the tokens or seals that I have described in the next paper.

SOME RARE SQUARE COPPER PIECES FROM AHICHCHHATRA IN BAREILLY DISTRICT.

By Mr. M. B. L. Dar, B.Sc., LL.B., P.C.S., Almora.

[Plate X-A.]

I was much interested in the note by Mr. Ajit Ghose on "Rare Oblong Coins from Rajgir" published in Vol. I. of the *Journal of the Numismatic Society of India pp. 5-8*; and since he refers to me in connection with a somewhat similar find from the site of ancient Ahichchhatra (modern Ramnagar) in Bareilly District I think it would interest scholars of numismatics, if I describe the pieces in my possession.

I do not consider my pieces to be coins at all. Each one of them has a solder mark on the reverse which suggests their probable use as tokens or seals rather than as coins. Had they been coins, there was no necessity for them to have any solder marks on their reverse.

All these pieces vary between 6 to 14 grains and the variation in weight is evidently due to variation in the quantity of solder material sticking on the reverse of these pieces. In all these specimens, the obverse symbol is enclosed within a double border—raised and ornamented—which appears more like oblique strokes arranged in a line giving it the appearance of a twisted cord. Date trees are not only not common in this part of the country but the design on my pieces is certainly not anything like a date palm leaf.

These pieces are of exquisite workmanship and are not die struck but cast.

I have examined Mr. Ajit Ghose's specimens, and after a re-examination of my own pieces, I find that my pieces are clearly distinguished from the former by

(*a*) lighter weight,

(*b*) solder mark on the reverse, and

(*c*) differentiation in the symbol.

They are however, remarkably similar in workmanship, which leads me to regard them as belonging to the same period.

Two of the pieces in my cabinet have no solder mark; I therefore consider them to be unused pieces while the others having a solder mark are used ones.

They have been found with punch-marked and Pañchāla coins on the surface, but in the absence of any reliable or sufficient data, it is impossible to assign them an exact date.

Two of these pieces in my cabinet have one well-known Pañchāla symbol on the obverse and another incomplete Pañchāla symbol on the reverse. I would therefore definitely assign them to the Pañchāla period.

Four others have a symbol, shaped like a lotus, or maybe, it is a "*chakra* of 8 spokes or *patras* (leaves) with a nucleus centring round a *nābhi*" as mentioned by Mr. Durga Prasad in his scholarly paper on punch-marked coins on page 29 of the *N. S.*, No. XLV. This would give a further support, from a rather unexpected quarter, to Mr. Durga Prasad's theory of the adaptation of Tantric *mudrās* as early coin symbols.

I have in my collection one curious piece with a beautiful figure of a tortoise on the obverse. This piece too has a solder mark on the reverse and is therefore a used token or seal, though of a different shape.

I do not know if Mr. Ajit Ghose has found any piece with a solder mark, but in view of definite solder marks on most of my pieces and the absence of such marks on only a few, I would regard the pieces in my collection as tokens or seals and not coins.

I. Æ.

Weight—10 grains.
Size—.4 × .4 inches.
Obverse—The Pañchāla symbol within a raised double border of strokes or dots, which gives it the appearance of a twisted cord. Only traces of outer border visible.
Reverse—Portion of the Pañchāla symbol . Pl. X-A, No. 4.

II. Æ.

Weight—6 grains.
Size—.4 × .35 inches.
Obverse—As in No. 1.
Reverse—Pañchāla symbol

III. Æ.

Weight—10 grains.
Size—.4 × .4 inches.
Obverse—Symbol within raised border as in No. 1, but with both inner and outer border quite distinct.
Reverse—Plain but with a solder mark.

IV. Æ.

Weight—10 grains.
Size—.4 × .4 inches.
Obverse—As in No. 3.
Reverse—As in No. 3.

V. Æ.

Weight—10 grains.
Size—.4 × .4 inches.
Obverse—Indistinct but probably as in No. 3.
Reverse—As in No. 3.

VI. Æ.

Weight—9 grains.
Size—.4 × .4 inches.
Obverse—As in No. 3.
Reverse—As in No. 3.

VII. Æ.

Weight—12 grains.
Size—.4 × .4 inches.
Obverse—As in No. 3.
Reverse—As in No. 3.

VIII. Æ.

Weight—14 grains.
Size—.4 × .4 inches.
Obverse—As in No. 3.
Reverse—As in No. 3.

IX. Æ.

Weight—13 grains.
Size—.5 × .5 inches circular.
Obverse—Figure of a tortoise within raised double border as in No. 3.
Reverse—As in No. 3.

ANCIENT COINS FROM MAYURBHANJ

By P. Acharya, B.Sc.,

State Archæologist, Mayurbhanj.

The first report on the Roman gold coins was written as follows by Mr. Beglar :—

"Some years ago a great find of gold coins containing, among others, several of the Roman emperors, Constantine, Gordian, etc.,[1] in most beautiful preservation, was found near Bamanghati. Mrs. Hayes, the Deputy Commissioner's wife at Singhbhum, possesses several very fine ones indeed, made into a bracelet, but in such manner as to leave the coins absolutely uninjured. I tried in vain to procure some, but failed, except the choice ones (choice as to excellence of preservation) picked out and secured by the Deputy Commissioner ; the rest got dispersed, and it is now hopeless to try and find out where they are, if they indeed exist at all and have not been melted. The finding of these coins at Bamanghati shows that it lay on some great line of road from the seaport Tamluk to the interior, for it is more probable that they came in *via* Tamluk than overland from the Roman empire."[2]

As we are not in a position to examine these coins now, we must feel particularly indebted to Mr. Beglar for his interesting note, quoted above, about these Roman coins.

It is quite possible that subsequent to the above discovery of Roman coins, other coin hoards may have been discovered in Mayurbhanj State, but we have no records about them. To one such hoard undoubtedly belong the genuine copper coins of the Kushāna emperors in the Baripada treasury ; I have, however, failed to get any clue to its time and place of discovery.

Since the establishment of the Archæological Department in the Mayurbhanj State, hoards of old coins have been discovered and reported with a pleasing frequency, thanks to the policy of awarding rewards to the discoverers. In 1923 a hoard of copper Kushāna coins of Kaniska and Huviska and the so-called Purī-Kushāna coins was found out at Bhanjakia, not far from Khiching,

---

1 Bamanghati is a Subdivision in Mayurbhanj. In the old maps of the survey of India, Bamanghati finds a mention ; it is seen to be very near modern Rairangapura, which is the subdivisional headquarters.

2 Cunningham, *Report of the Archæological Survey of India* for 1874-75 & 1875-76, Vol. XIII, pp. 72-73.

and its report was published by Rai Bahadur R. Chanda.[3] Some of these coins have been distributed to almost all the important museums in India and to the British Museum, and Allan's latest book on the coins of India contains a reference to them. Since 1924, Kushāna and so called Purī-Kushāna coins have been found at various places in Mayurbhanj and the important hoards are mentioned below. During the excavation of Viratgarh at Khiching a few Kushāna coins and a large number of Purī-Kushāna coins were found. Among the Purī-Kushāna coins there were many twin coins which, when broken, would turn into two single coins. Such double coins have not been found in the hoards of Ganjam, Puri, Balasore, Mayurbhanj, Singhbhum and Manbhum, which have been all referred to in the article on the so-called Purī-Kushāna coins by Dr. S. K. Bose.[4] In this article, Dr. Bose has, however, not referred to the hoard found at Barabhum in Manbhum,[5] and to an earlier hoard described by Mr. Beglar as follows :—"It is said that a large quantity of coins were found buried at its foot some years ago, when a European official from Ganjam dug it up—some of gold and silver, but many of copper. I could get none of the gold and silver coins, but I got a few copper ones much defaced. They were evidently Indo-Scythian, and thus confirm the great antiquity of the place, and incidentally prove the great influence of the Indo-Scythians in India when even their copper currency is found so remote from their capital.[6]"

In May, 1939, 105 Purī-Kushāna coins were found in a brass pot at Nuagaon 3 miles west of Josipur and nearly 3 miles east of Bhanjakia in Mayurbhanj. In this connection I may mention here that I have collected a few copper Kushān and Purī-Kushāna coins from the Keonjhar State, which were found at Sitabinjhi where there are ruins as well as a rock painting with a fragmentary inscription belonging to 4th or 5th century A.D., and which has been read as *Sri Diśa Bhanja* by Pandit B. Misra. (*Modern Review*, 1938, pp. 301-5.)

The hoard of Khiching coins can be classified as full, half and quarter coins. Among the coins of Bhanjakia, Khiching and Nuagaon hoards of Mayurbhanj State, many coins possess frills of the molten metal from the edges of the mould, and there are a few coins in pair which are indicative of non-circulation of the coins ; it may be therefore conjectured that there was a mint at Khiching. Dr. S. K. Bose also expected a mint somewhere in the neighbourhood of

---

3 *Annual Report of the Archæological Survey of India* for 1924-25, p. 38.
4 *Indian Culture*, Vol. III, pp. 727-730.
5 *Banaa Sahitya Parishat Patrika*, Vol. XVIII, 1328 (1921), pp. 25-30.
6 Cunningham, *op. cit.*, Vol. XIII, p. 116.

Manbhum and wrote as follows :—"With the exception of six coins the rest are not well trimmed and invariably show protruding edges. What was long ago suspected by Walsh seems now to be confirmed. The regions from which my coins come (which, incidentally, I might say is not very far from the provenance of Mr. Walsh's coins) most likely was a mint area where the coins were actually manufactured."[7] The late Mr. R. D. Banerjee in his *History* of Orissa, pp. 108-119, has dealt with the Kushāna and so called Purī-Kushāna coins and has written as follows :—

"The occurrence of this type of the coinage from Singhbhum to Ganjam very probably indicates influences of the Kushānas. We know that Magadha was included in the empire of the great Kushānas and, therefore, it could not be unscientific to assume that the so-called Mughal invasion[8] of Orissa was really the conquest of the country by the Kushan foreigners."[9] No gold coins of the Kushāna kings have been found anywhere in Orissa, but such coins are known from Chota Nagpur[10] and Bengal,[11] and from this it is expected that Kushāna gold coins were circulating as currency in Orissa also.

The most important find of coins in the Mayurbhanj State is undoubtedly that of 3 gold coins (archer type) of Chandra Gupta II, which were discovered in August 1939 at a village called Bhanupur on the left bank of the Son river in Mayurbhanj. This discovery could not have come to our knowledge, if there had been no altercation among the villagers leading to the intervention of the State Police. The Police could however recover only three gold coins. The discovery of gold Gupta coins is unknown in Orissa, and this is the first report of its kind. There is no report on the discovery of Gupta coins from Chota-Nagpur. Only one Gupta coin was found at Tamluk. It may be that all these Gupta coins were brought by the merchants.

All authorities agree that the copper coins of the so-called Purī-Kushāna type are, like the Gupta coins, copied from the Kushāna coins. The inscribed *Taṅka* coins are no doubt of later date, probably of the 7th century A.D., but the un-inscribed Purī-Kushāna coins should be much earlier, as early as the 3rd or 4th century A.D. Gupta Kings are not known to have conquered or annexed Orissa to their empire,[12] and so it may be inferred that the kings of Orissa

---

7 *Indian Culture*, Vol. III, p. 730.

8 [Mr. Banerji is here referring to a Mughal invasion of Orissa which, according to the Mādalā Panjis, is said to have taken place before the Saka year 396.—EDITOR, A.S.A.]

9 *History of Orissa*, Vol. I, p. 113.

10 *J B. & O. R. S.*, Vol. I, pp. 231-32.

11 *J &. P. A. S. B.*, Vol. XXVIII, p. 128 ff.

12 *History of Orissa*, Vol. I, p. 117.

during the Gupta period of the Indian History had their own coins and were quite independent of the Gupta emperors. Their coinage is represented by the so-called Purī-Kushāna coins. Professor A. S. Altekar also seems to accept this view, for he says :—"If the Kushāna coins were introduced in Orissa by pilgrims and merchants, it is clear that they soon became as a model for their coinage which was continued up to the 7th century A.D." [13] Dr. S. K. Bose writes on this subject that "these so-called Puri-Kushāna coins, appear to possess purely a local and dynastic value." [14]

Rai Bahadur R. Chanda suggested in his Annual Report of the Archæological Survey of India for 1924-25 that the designation of the "Puri-Kushāna" coins should be changed to "Oriya Kushan" coins, but Dr. S. K. Bose did not prefer "any suggestion of attributing a geographical name of the coins." [15] When he is of opinion that these coins only "possess purely a local and dynastic value" in Orissa, it is not clear why he demurs to the suggestion. I am suggesting that we are now in a position to designate these so-called Puri-Kushāna coins as "early Orissan Coins" which are practically found in Orissa, including States of Mayurbhanj and Keonjhar and in the districts of Singhbhum and Manbhum, which are contiguous to Mayurbhanj and contain enough relics of the Orissan Culture.

---

13 *Numismatic Supplement* No. XLVII, 1937, p. 106.

14 *Indian Culture*, Vol. III, p. 730.

15 *Ibid.*

SOME RARE COINS IN MY CABINET.

By Capt. P. S. Tarapore.

[Plate XI.]

(a) BAHMANI KINGS OF GULBARGĀ.

1. Muhammad Shah I.

AR. Mint. Fathabad.

Date. (٢ ٢ ٧) Sic. (766 A.H.)

This is a rare Bahmani mint published in N. S. No. XLIII by Mr. Khwaja Muhammad Ahmad of Hyderabad Museum. It is interesting on account of its date (٢ ٢ ٧) which appears to be a mistake of the die-cutter. Fathabad is Dharur in Bir District of H. E. H. the Nizam's Dominions.

2. Ahmad Shah I.

AR. Mint—Ahsanābād.

Date—823 A.H.

This coin is interesting as it throws some light on the possibility of Ahmad Shah I, issuing coins in his own name during the life-time of Firoz Shah. Ahmed Shah came to the throne in 825. The date on this coin is clearly 823 A. H. The type also is that of an early period. It could not be a die-cutter's mistake for 832 or 833 A.H. The seat of Government was transferred from Ahsanabad to Muhammadabad in 826 A. H.

Firoz Shah, whom Ahmad Khan succeeded, was engaged from 820—822 A. H. in a war with Deva Raya, Raja of Vijayanagar in Pangal (a place in Nalgunda District, H. E. H. the Nizam's Dominions). He was defeated there with heavy losses.

On his return to the capital, he became jealous of his brother Ahmad Khan on account of a prophecy that the latter and not his own son Hussain Khan would succeed him. Firoz was advised to put out Ahmad Khan's eyes to prevent the prophecy coming true. When Ahmad Khan learnt of his danger, he fled to Khanapur (Rasulabad), accompanied by his friend Khaliq Hussain Basri and about 400 trusted followers and set up his standard as Sultan. His force was increased by recruits from Gulbarga, Bidar and Kalyani. Firoz sent a force of 8,000 Sawars and elephants against him. Ahmad Khan contrived to procure some horses and oxen from some traders and Banjaris to serve as mounts for his men and thus to inflate his

force. The horsemen were placed in front and the soldiers with the oxen in the rear carried flags. When Firoz's army met this army of troopers, they are said to have been seized with panic and fled. As a result of this triumph, all the nobles and Firoz's army came under his standard. (*Vide* "Silsilac-Asafia," Vol. III, Part I, pages 141—143.)

These events evidently refer to the year 823 A.H., when Ahmad Khan must have struck the first coin issued by him. Two years later Firoz abdicated in favour of Ahmad Khan.

3. Muhammad Shah III.

AR. Mint—Muhammadābād (Bidar).

Date—877 A.H.

This is a new type of silver Tanka of Muhammad Shah III. The obverse of this coin resembles the one found on copper coins. The reverse is the same as those of the known gold and silver coins of this king.

(b) MUGHAL EMPERORS.

4. Shāh Jāhān I.

AV. Mint—Katak.

Date—Aban 1046 A. H.

This is an unpublished Muhar of Shah Jahan from this somewhat rare mint.

5. Aurangzeb Ālamgīr.

AR. Mint—Zafarābād (Bidar).

Date—(10) 79-12 R. Y.

This is an unpublished 1/16 rupee from this Mint. ظفر of ظفرا باد is clear. It cannot be Zafarpur as the legend with مہر منیر on obverse is found on early issues from Zafarabad mint.

6. Aurangzeb Ālamgīr.

AR. Mint—Nasaratgadh ?

Date— -4×.R. Y.

Nasaratgadh is written نصرتکڈھ instead of the usual way نصرت گڈھ found on rupees of Aurangzeb. If the reading is correct, then No. 3131. a. of the Lucknow Museum Catalogue must be a coin of Nasaratgadh and not of Qamarnagar Mint.

7. Aurangzeb Ālamgīr.

AR. Mint—Nasirābād.

Date—1101 A. H.—34 R. Y.

This is a clearer specimen of the rupee of Aurangzeb from Nasirabad Mint published in N. S. by Mr. M. A. Saboor of the Central Museum, Nagpur.

8. Azizuddin Ālamgir II.

Mint—Qamarnagar (?)

Date—Missing.

The Mint mark ☘ and the type of calligraphy on the reverse of this coin resembles that of Qamarnagar Mint. If so, it is an unpublished Mint of this Emperor.

A RARE BAHMANI RUPEE.

By Mr. C. R. Singhal,

Prince of Wales Museum, Bombay.

In article No. 305, Numismatic Supplement No. XLIII, Capt. P. S. Tārāpore of Hyderabad (Deccan) has described a rare Bahmani rupee and assigns it to Tehamtan Shāh of the Sāsānian origin. The legend, according to him, reads as follows :—

Obverse. المتواثق بالله الحنان ابو المظفر غياث الدنيا والدين

Reverse. تهمتن شاه السلطان بن السلطان

Right Margin احسناباد and lower margin, the date ۷۹۹. He says: "Ghiyasuddin is one of the four Bahmani kings whose coins have not been discovered. Tehamtan Shāh seems to meto be quite clear. There is no doubt regarding its legibility. It cannot be 'Bahman Shāh' as the nuqtas on the 1st and 2nd ت are distinct. Tehamtan in Persian means Hercules. It will not be surprising if in future the genealogy of the Bahmani kings is traced back to Sāsānian kings."

By assigning this coin to Tehamtan Shāh, Capt. Tārāpore has added one more king to the rulers of the Bahmani dynasty and has traced its origin to Sāsānian kings. So far as the historical evidence is concerned, no ruler of this name is known to have existed in the Bahmani dynasty. If one carefully looks at the coin, he can easily find out that the whole trouble has arisen due to the wrong position of the nuqtas over the name of the king. The nuqtas are sometimes placed above or below a word to suit the taste and convenience of the scribe and no special importance as to their position in the Muslim Epigraphy and Numismatics is attached. Capt. Tārāpore says that "the nuqtas on the 1st and 2nd ت are distinct," and thus according to him there should be four nuqtas above, but actually there are two nuqtas only and hence his belief that it can be read "Tehamtan Shāh" falls to the ground. Instead of placing two nuqtas above, if one would have been placed below, the whole controversy could have been set at rest and one could easily read—"Bahman Shāh" which has been read as "Tehamtan Shāh."

He also says that "Ghiyasuddin is one of the four Bahmani kings whose coins have not been discovered." From the epithet "Ghiyasuddin" he evidently hits at the mark but the belief that no coins of this Sultan are known and secondly the wrong position

of the dots on the name of the king, leads him astray and forces him to assign this coin to Tehamtan Shāh. Although the coins of this ruler are not known so far, Mr. James Gibbs on page 18 of his article on "Gold and Silver Coins of the Bahmani Dynasty," published in Numismatic Chronicle 1881, makes a mention of a coin issued by this ruler. He says: "The short reign of Ghiās-ud-din, which extended over only six weeks, *did produce* a coinage, since General Cunningham has in his collection a copper coin of that prince, which reads Ghiās-ed-dunya-wa-ud-dīn, but it is not dated."

The date on the coin is 799 A. H. and if we look up the pages of any standard history of the Bahmani Dynasty we can find out the name of the Sultan who ruled in that year. On page 34 of "The History of the Bahmani Dynasty" by Major J. S. King, we find not only the name but the complete title of the Sultan, which is in close resemblance to the legend inscribed on this coin. It runs : ابوالمظفر سلطان غیاث الدنیا والدین بهمن شاه Abul-Muzaffar Sultan Ghiyas-ud-dunya-wa-ud-din Bahman Shāh.

It, therefore, conclusively proves that the coin in question does not belong to Tehamtan Shāh, but is a unique rupee of Sultan Ghiyas-ud-din Bahman Shah, the sixth ruler of the Bahmani Dynasty.

THE DOUBTFULLY-ASSIGNED COINS OF NĀSIR SHĀH.

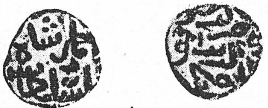
By Mr. C. R. Singhal,

Prince of Wales Museum, Bombay.

In my article published on p. 40 of the Numismatic Supplement No. XLII, I have tentatively assigned three copper coins of Nāsir Shāh to Mahmūd II of Gujarat. I have since been trying to find out the real Nāsir Shāh and assign these coins to him and it is a matter of great satisfaction that the problem has been solved at last.

The name of Nāsir Shāh has undergone a little change and it should now be read Nasīr Shāh instead of Nāsir Shāh. While turning over the pages of the Cambridge History of India, Vol. III (Turks and Afghans), I came across one Nasīr Khān who having proclaimed his independence, had assumed the title of Nasīr Shāh and had been the Governor and ruler of Kālpi. He was the son of Qādir Khān who styled himself Qādir Shāh afterwards, and the estate of Kālpi, made over in perpetuity to his father by Hushang Shāh of Mālwa, came into his heritage.

As he had adopted certain principles which were opposed to the tenets of Islam and as he used to scandalize the true Muslims, he was the cause of conflict between Mahmud Khilji of Mālwa and Mahmud Sharqi of Jaunpur. He was expelled from the town and after he agreed to abandon his heretic views, he was again installed in his original position.



1

2

3

After writing the above few lines my attention was drawn to Prof. Hodivālā's article on "The Unassigned Coins of Jalāl Shāh Sultani" published just after my article on p. 41 of the same journal, and it is a matter of happy coincidence that the learned professor

assigns the coins of Jalāl Shāh to the same dynasty to which these coins belong and proves that Jalāl Shāh and Nasīr Shāh were both brothers, sons of Qādir Shāh, the ruler of Kālpi. Prof. Hodivālā in support of his proposition, has given numerous historical extracts and from the catena of these facts, a regular line of the semi-independent rulers of Kālpi can now be drawn as under :—

Malikzāda Firūz.

(1) Mahmūd Khān (802 to 815 A.H.=1399 to 1412 A.D.)

(2) Qādir Khān or Qādir Shāh (816 to 836 A. H.=1413 to 1432 A.D.).

(3) Jalāl Shāh (837 to 842 A. H. =1433 to 1438 A.D.)

(4) Nasīr Shāh (from 843 A.H.=1439 A.D.)

It is needless to reiterate all the historical events summed up by Prof. Hodivālā, and in order to get a complete idea of the erstwhile rulers of Kālpi, the readers of this note are requested to read these two articles consecutively.

The coins are round in shape and weigh 140, 134 and 65 grs. respectively.

The inscription on the obverse is Nāsir-ud-dunya-wa-ud-din Abul-fatḥ, and on the reverse 'Nāsīr Shāh us-Sultan.' The coins bear no date.

The legend is inscribed thus :—

Obverse.	Reverse.
ناصر الدنيا	ناصير شاه
والدين ابو	السلطان
الفتح	

A RARE FRACTIONAL PICE OF SHER SHAH SURI.

By Mr. C. R. Singhal,

Prince of Wales Museum, Bombay.

A few days back, a dealer brought a hoard of rusty copper coins along with some other antiquities for sale. Out of this hoard, four tiny copper coins were purchased for this Museum. The coin which is described here, is one of these four. On careful scrutiny it turned out to be a rare one-twentieth of a paisa of Sher Shah's currency. The weight is 16 grains only and the coin is dated 94× A.H. The legend runs as under :—

Obverse— ابوا لمظفر
٩٤ ×

Reverse— شاه
شــــير
السلطان

Mr. H. N. Wright in his Catalogue on "The Coinage and Metrology of the Sultans of Delhi," has described four such coins (*vide* Nos. 1278 to 1281), but the legend on the reverse of this coin is different from those illustrated by him. We know "Abul-Muzaffar" is the honorific title of Sher Shah and the date 94 × A.H. tallies with the year of his reign.

CATALOGUE OF THE COINS
of the
SULTANS OF GUJARAT

Compiled by - - C. R. SINGHAL
& edited by - - G. V. ACHARYA

150 Pages with 11 plates.

The catalogue is really a corpus inasmuch as it affords the most complete and comprehensive study of the coinage of the Sultans of Gujarat published hitherto. All the known coins of the dynasty in various cabinets of the world are incorporated in this publication.

It can be had for Rs. 5/- only from

The Curator, Archaeological Section,
Prince of Wales Museum, BOMBAY.

NOTE ON A SILVER COIN OF AURANGZEB.
A NEW MINT.

By Rai Bahadur Prayagdayal, Lucknow.

The examination of a hoard of 30 silver coins found in Allahabad District of the U. P. has resulted in the discovery of a new mint name *Hukeri* or *Hokri* of Mughul Emperor Aurangzeb. The coin has been acquired by the Provincial Museum, Lucknow, and can be read as under :—

	ب
Obverse—	زد چو بدر منیر
	در جہان
Reverse—	نه—ست
	جلوس ہوکری
	۴۹
Weight—177 grs.	ض----رب
Size— 95.	

Hukeri is a village in the Chikodi Taluka of Belgaum District in the Bombay Presidency, and is connected with Poona and the large town of Gokak by metalled roads. Hukeri was an important town during the reign of Adil Shahi kings of Bijapur and has still some architectural remains of that period. After the fall of Bijapur and its inclusion in the Mughal Empire in 1686 A.D., Hukeri was the only part of Belgaum that remained in the possession of the Marathas.

Hukeri was certainly an important place during the reign of Bijapur kings and was under the Marathas during the Mughal rule from Aurangzeb downwards. Whether this is an issue of the Maratha Chief in the name of Aurangzeb or of Aurangzeb himself is the main point under consideration.[1]

Authorities of the Hyderabad Museum have also acquired a coin of this mint.

---

[1] This is evidently a coin struck by the Maratha Chief at Hukeri in the name of Aurangzeb. It was a well known mint of the Marathas and coins issued from this mint in the name of the later Mughals will be published in the next issue of this journal.—Editor.

COINS OF DÉLWĀRĀ.

By R. G. Gyani, M.A.,
(*Prince of Wales Museum, Bombay.*)

In the Collection of Prof. Hodiwala that was purchased for the Cabinet of this museum, there were some coins identified as Akbar's coins of Agra with a mark of query. In size and caligraphy these coins slightly differ from those of Akbar's copper pieces which are generally dumpy and bigger in size with very bold letterings. These coins are of three different sizes :—The biggest size measures 7 or ·6, the middle size ·5 or ·55 and the smallest size ·4 or ·45. They weigh roughly in proportion of 3, 2 and 1 being about 150, 100 and 50 grains respectively with a difference of 2 to 6 grains in case of individual coins.

They bear the legend introduced by Akbar namely "Allaho Akbar," with Jalla Jalalahu on one side and Zarbe Delwāra on the other. It is in most cases spelt as دیلوا ارہ with double alif perhaps to record the correct pronunciation of the word with a long sound of ā in wā. This method is seldom noticed in the Muhammadan Coinage.

In ordinary course, we would identify it as Akbar's coin of Delwara—a mint unknown hitherto. But the style of the coin suggests that it may have been an issue of some Rajput State of that name. Looking for it in the Imperial Gazetteer, Vol. XI, Page 241, we find that it is an estate under the jurisdiction of Udaipur State found by Sajja who came from Kathiawar with his brother Ajja in the beginning of the 16th century and who was killed (1534) at the seige of Chitor. The present chief, who is called Raj Rana, traces his origin from them who were Jhala Rajputs. It is, therefore, possible that the rulers of this State, after the conquest of Chitor by Akbar and the flight of the Rana Pratap of Mewar from that place, might have accepted the suzerainty of the great Mughal and struck local coins in his name and style to show that they put it in action too and thus became safe from any more Imperial invasions.

All these coins bear the date 1000 either on the reverse or on the obverse.

We have two tiny coins of Jehangir also of the smallest size with the legend. جہانگیر بادشاہ on one size and ضرب دیلوارہ on the other. Here we find only one Alif. A detailed study of the legends with several variations is as follows :—

There are about eight varieties of these copper coins on which

the legend of Akbar and the mint name appears with the date 1000 on some of them.

Variety. 1. Obverse : الله
Reverse : دیلواره

,, 2. Obverse : الله اکبر
Reverse : ضرب سنه
دیلواره

,, 3. Obverse : اکبر الله
Reverse : دیلواره
۱۰۰۰

This coin bears a very clear date.

,, 4. Obverse : الله
اکبـــر
سـنه ا
ضرب
Reverse : دیلواره

,, 5. Obverse : الله
اکبـــر
جل جلاله
ضرب
Reverse : دیلواره

,, 6. Obverse : الله
اکـــبر
جل جلاله
Reverse : دیلواره
۱۰۰۰
ســنه

,, 7. Obverse : الله اکبر
۱۰۰۰
سنـــه
Reverse : ضرب
دیلواره

,, 8. Obverse : اکـبر
جلال الدین
محمـــــــد
ســنه

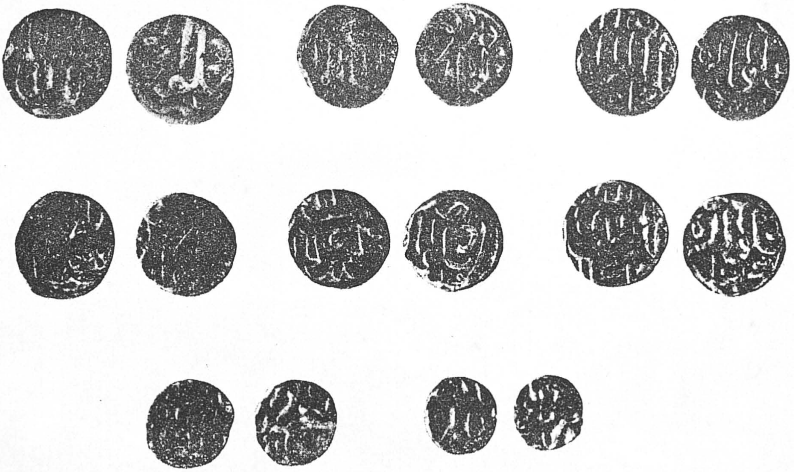
Reverse : دیلواره
سنہ

Jehangir

1. Obverse : جہانگیر بادشاہ

Reverse : دیلواره
ضرب

These coins await a historical investigation to discover the authority under which these tiny records came into existence. There are two more places bearing the name Delwara but the one under the Udaipur jurisdiction with which the mint name has been identified in this note seems to be the most plausible.



REVIEWS

A Hoard of Silver Punch-marked Coins from Purnea, by P. N. Bhattacharya, M.A. Memoirs of the Archæological Survey of India, No. 62. Pp. vi, 96. With 12 Plates. Price Rs. 5-6 as. or 8s. 6d.

This is a notable contribution to the literature on punch-marked coins. The Director-General of Archæology in India, Rao Bahadur K. N. Dikshit, in a foreword briefly describes the horde known as the Purnea Horde, which was found in a hard conglommerate mass embedded in a small river at Patraha in the Purnea District, Behar. The horde comprised a total of 2,873 silver punch-marked coins and is the largest hoard so far unearthed. Mr. Pares Nath Bhattacharya, Assistant Curator in the Archæological Section of the Indian Museum, was entrusted with the preparation of a systematic study of 1,703 coins selected from the hoard ; it must be said to his credit that he has done his work with thoroughness and care, both of which are so essential in any study of the extremely complex subject of India's oldest coinage. Following more or less the lines of treatment in Mr. Allan's Catalogue of the Coins of Ancient India in the British Museum, he has arranged the coins into three main classes, which are subdivided into different groups which again include many varieties. The plates of symbols in tabular form giving references to the coins themselves are particularly useful. A number of new varieties have been recorded. Of especial interest is the large number of coins tabulated on pp. 5—7 and 11—13 in which the sun symbol as well as the 'six-armed' symbol, which occur on every coin of the Taxila hoard found in 1924 and recently authoritatively described by Mr. E. H. C. Walsh are entirely absent and instead certain other constant symbols appear on the obverse.

A word of praise must be given to the excellent drawings of symbols occurring on the coins as well as to the general get-up of the volume.

AJIT GHOSE.

SUPPLEMENT TO THE VOLUMES II & III OF THE CATALOGUE OF COINS IN THE INDIAN MUSEUM, CALCUTTA.

BY MAULAVI SHAMSUDDIN AHMAD, M.A.

ASSISTANT SUPERINTENDENT OF THE ARCHAEOLOGICAL SECTION
INDIAN MUSEUM, CALCUTTA.

Both the publications mentioned above have been compiled after the model of and issued as supplement to Mr. Nelson Wright's Catalogues of Coins in the Indian Museum, Calcutta, published in 1907.

In keeping with the parent volumes, the Supplement to Vol. II deals with the Coinage of the Sultans of Delhi and their Contemporaries in various provinces of India with a new addition of the coins of the Nawabs of Madura, while the Supplement to Vol. III deals with the Mughal coins added to the collection of the said Museum since the publication of the original Catalogue. Inasmuch as they fairly represent almost all the types known hitherto and also add a few ones to the stock of the numismatic knowledge, these publications can be looked upon as useful sources of sidelights on the Muslim period of the Indian history. Let us, therefore, cast a glance over a few noteworthy issues brought to light by the publication of these Supplements.

SUPPLEMENT TO VOL. II.

SULTANS OF DELHI

The most striking of the rare coins of this Section are Nos. 118 and 119. One is a square gold Muhr and the other is a silver coin issued from the mint Akbarpur Tanda by Sher Shah Suri. Besides, there are a number of new and unpublished types included in this supplementary volume.

The plates unfortunately do not afford satisfaction inasmuch as they do not testify the readings properly. Want of arrangement of coins in the serial order mar the easy reference. Some rare coins do not at all find a place in the plates and thus the chance of verifying the readings of some new mints is denied to the readers. Out of the rare ones that are illustrated a reference is invited to coin No. 144 on plate I which is assigned as a coin of Sher Shah issued from a new mint Balapur. We cannot, however, agree with this reading and discovery as the mint name on the coin illustrated is "Narnol" without doubt.

SULTANS OF BENGAL

This Section of the Cabinet of this premier Museum of Bengal is naturally the richest and makes a valuable contribution to the history of Bengal. Based on these numismatic records, the author has made certain corrections in the chronology of the Sultans of Bengal. Here are the conclusions arrived at by the author :—

(1) Ghiyasuddin Azam Shah is hitherto known to have ruled from 792 to 799 A. H. while the numismatic evidence mentioned in the Supplement extends his rule to 810 A. H.

(2) Saifuddin Hamza, who is supposed to have ruled from 799 to 809, is not substantiated by numismatic evidence. His coins recorded in this Supplement spot his rule to 813 and 814 A. H. only.

(3) Similarly, the hitherto acknowledged reign of Shihabuddin Bayazid Shah being 812 to 817 is reduced to 814 to 817 A. H.

(4) Alauddin Firozshah, son of Bayazid, is introduced in the line of the Sultans of Bengal for the first time and is shown to have ruled for a few months in 817 A. H.

(5) Jalaluddin Muhammad Shah's date of the accession of the throne of Bengal is corrected from 817 to 818 A. H.

Of the several new and hitherto unrepresented types of these coins the following merit a mention:—

(*a*) AR—6 ; A coin of Ghiyasuddin Bahadur Shah minted at Sunargaon bearing the name of Muhammad IV bin Tughlaq on the reverse. No coin bearing the name of both these monarchs has been noticed so far.

(*b*) AR 48 :—is an interesting coin of Shamsuddin Iliyas Shah minted at Firozabad and dated 760 A. H., inasmuch as it contradicts the historian's version of 759 A. H. being the date of his death.

(*c*) AR 109 & 110 are Sufuddin Hamzashah's coins of Satgaon and Muazzamābad mints respectively, and are published for the first time.

(*d*) AR 139 is a very interesting coin of Jalaluddin Muhammadshah, inasmuch as on the reverse of the coin is figured a lion advancing to right with his forepaw raised. This is the first instance where the figure of an animal is noticed on the coins of the Sultans of Bengal.

(*e*) Æ 154—This coin of Rukniddin Barbak Shah discovered by the author upsets the belief prevailing hitherto that the Sultans of Bengal did not strike copper coins.

(*f*) AR 223—A new mint of Kalifatabad Badarpur to those whence Ghiyasuddin Mahmud Shah II is known to have issued his coins.

Thus, it can be seen that this Section of the Supplement contains a good many new types of coins with far-reaching effect on the Numismatics and History of the Sultans of Bengal.

MADURA (SOUTH INDIA)

The coins of the rulers of Madura in South India is a new introduction in this publication. The discovery of a coin of Jalaluddin Ahsan Shah dated 734 pushes the foundation of this dynasty back by a year. Besides, several new dates are recorded in this Section also. For instance, coins of Ahsan Shah dated 734, 735 and 739 and the issues of Fakhruddin Mubarak Shah of 760 and 764 A. H. are noticed for the first time.

BAHMANS COINS

The collection of these coins in the Indian Museum seems to have been considerably enriched since the publication of the last catalogue. The coins of Nizam Shah and Mahmud bin Muhammad Shah are recorded for the first time in this publication.

A few coins of this Section which deserve a mention are :—

AR 1—This coin of Alauddin Bahamn Shah, the founder of the Bahmani dynasty, is published for the first time in this Supplement. Besides this, Nos. AR 5, Æ 12, 27 and 57 are rare pieces.

SUPPLEMENT TO VOL. III—MUGHALS.

The catalogues of Mughal Coins in the Cabinet of the Museums at Lucknow and Lahore are still almost a last word so far as the Mughal coins are concerned except a few minor details in which the new discoveries differ. This Supplement also adds a few such types which can be considered as rare and valuable additions to the Cabinet of the Indian Museum since the publication of Vol. III.

The most striking of the rarities are two silver types of Barar mint on one of which (Nos. 91 & 92) a tiny bird is carved below the mint name while in another type (Nos. 93, 95 & 96) the word رام Ram in Persian characters replaces the bird. Whether these are introduced on the coins as a result of Akbar's love for novelty or are symbols of the mint masters who tried to put in their marks on these issues, is a question that needs consideration.

NEWS AND NOTES.

Discovery of New Ancient Coins in Jaipur State.

The department of Archæology of Jaipur State is to be congratulated on the very important numismatic discoveries it has made during the recent excavation season. A large number of Malava coins, a big hoard of punch-marked coins containing as many as 3,076 coins and some very early inscribed coins of the 3rd century B. C. were found at the village Rairh situated on the western extremity of the ruins designated by the same name. This village is situated in Thikana Bhartala in Tehsil Bonli of the Jaipur State, situated at a distance of 56 miles from Jaipur. The distance of the first 41 miles is covered by the rail, as well as by a good metalled road, but beyond Nawai, where these roads terminate, there are only cart tracks, not easily accessible. Dr. K.N. Puri, the Superintendent of Archæology, Jaipur State, has very kindly supplied to us an account of this discovery, in the course of which he says :—

"The ancient site is situated in a large bend of the river Dhil and measures about 2,500 feet in length by about 1,500 feet from North to South. These ruins which have been the scene of systematic excavations by the Government of His Highness the Maharaja of Jaipur were unknown prior to the year 1937 when a treasure trove consisting of 326 punch-marked silver coins was found by a peasant boy. After preliminary examination of the site, excavations were started by the late Rai Bahadur Daya Ram Sahni, C.I.E., during the field season of the year 1938-39 and concluded by Dr. K. N. Puri, the present Superintendent of Archæology. The site which flourished as a metallurgical and industrial centre from about the 3rd century B. C. to the close of the 2nd century A. D. was in the occupation of Mālava tribe whose copper coins are found in abundance scattered all over the surface of the ruins. Besides a large number of other interesting antiquities, the site has proved to be extremely rich so far as the discovery of punch-marked silver coins is concerned ; of these no less than 3,076 composed of five hoards have been found. The Rairh collection of punch-marked coins which is now the biggest collection found from any single site from Peshawar to Godawari in the south and from Palanpur in the west to Midnapur in the east, will be studied in detail after the coins have been chemically treated. In addition to these a new type of rectangular copper coin bearing on the obverse an epigraph in two lines in early Brahmi characters of the 3rd century B. C. has been

found. The inscription reads "*Senāpati Vachagha*" which may be rendered "Of the Commander-in-Chief Vachhaga." The reverse shows an elephant with outstretched trunk standing on a standard rising from a railing. The name on this coin is of the same category of names, said to be the names of Mālava chiefs, but the prefix *Senāpati* is a new addition hitherto unknown."

Among other numismatic discoveries at the place may be mentioned an Uddhehika coin with the legend Sūryamitra, a coin of Dhruvamitra, and seven coins with the legend *Vapu* written in early Brāhmī characters. Among other kings represented in the hoard are Brahmamitra of Mathurā and the Greek ruler Apollodotus. Along with the tiny Mālava coins with the legend *Mālavāna jaya*, a Mālava seal also has been found with the legend [*Ma*]*lavajanapadasa*.

As we go to the press, we have received a detailed note on some of the coins discovered at Rairh from Rao Bahadur K. N. Dikshit, the Director-General of Archæology in India, which has enabled us to supply the above information. It will be published in the next number.

Discoveries at Rajghat (Benares).

The necessity of the extension of the passenger and goods platforms of the Kashi Station has resulted in important archæological discoveries at Rājghāt, the northern extremity of the present city of Benares. The construction of the platforms necessitated the filling up of extensive low-lying tracts, for which the Railway administration began to take earth from the mounds at Rajghat lying nearby. As they began to go deeper and deeper, a number of archæological finds began to be made. Among these were numerous inscribed seals of kings, ministers, private individuals and temples. A large number of them belong to the Gupta period, the level of which was reached when the excavations had reached a depth of about 18 feet.

From the numismatic point of view some of the seals are very important, for they show either the reverse or the obverse of some of the issues of the imperial Guptas. Thus some seals show busts similar to those on the obverse of the copper coins of the Guptas, and some have got a fan-tailed peacock as on the silver coins of Kumāragupta. It would thus appear that there was an imperial mint at Benares during the Gupta period, some of the dies of which were occasionally used for sealing. An article on these seals will appear in the next issue of the Journal.

The railway digging at the site could hardly be called an excavation; it was more a spoliation of an archæological site than

anything else. It however did one good thing ; it removed an enormous mass of earth and laid bare the remains of the Gupta period, which otherwise would have required several years to be reached. In the beginning of October 1940, R. B. K. N. Dikshit, the Director General of Archæology, visited the place and was able to reach an agreement with the railway authorities, whereby a large area of the excavation was left undisturbed at the disposal of the Archæological Department for carrying on scientific excavations. This work has now been begun by the Department and we hope that it will lead to further important archæological and numismatic discoveries.

EXCAVATIONS AT RAMNAGAR.

We understand that in the coming excavation season, the archæological department is going to concentrate a good deal of its energy and resources in excavating the ancient site of Ramnagar in Ahichchhatra. The site has been very rich in numismatic finds and we have no doubt that as a result of the excavations, further light will be thrown on the numismatics of the few centuries preceding and following the Christian era. The excavations will be carried out under the direct guidance of R. B. K. N. Dikshit, the Director-General of Archæology.

U. P. GOVERNMENT.

We have received the report of the Coin Committee of the United Provinces for the year 1939-40 wherein after the expression of regret at the sad demise of Sir H. Bomford and an appreciation of the work done by Rai Bahadur Prayag Dayal, the details of the Treasure Trove coins discovered during the year under review are given.

According to the report, in all nine hoards of coins found as Treasure Trove in various districts of the Province were dealt with, which consisted of a total of 5 gold, 934 silver, 202 billion and 3,219 copper coins. They included the issues of the ancient Yaudheya republic, Sultans of Delhi, Kings of Jaunpur and Malwa, Mughal Emperors and Balashahi rupees. They were acquired and distributed to various Coin Cabinets in India (of which a list is appended).

Among the gold coins a piece of Pran Narain bearing Saka Samvat 757 needs investigation. Out of the silver issues discovered, a rupee of Aurangzeb with Hukeri mint is an unpublished issue, about which a note has appeared elsewhere in this jounral. Billion coins yielded two rare issues of Mubarak Shah and Firoz Tughlak. Among the copper coins were found the most important issues of

the coins of the Yaudheya republic representing class 3 of the B.M.C. of which 16 coins furnish new varieties. This is the first instance of a hoard of Yaudheya coins found in U. P. Rai Bahadur Prayag Dayal's article on these interesting coins appears elsewhere in this issue.

Bihar Government.

We are supplied with a report from the Treasure Trove officer, Bihar and Orissa, and the Secretary of the Coin Committee, Patna, which informs us of the find of 12 silver and 64 copper coins which were acquired and distributed during the year.

Bombay Government.

The Honorary Secretary of the Bombay Branch, Royal Asiatic Society has sent us a report on the 75 silver coins found at Mahal Pandhari (West Khandesh) containing the issues of Aurangzeb and later Mughals which were acquired and distributed under the T. T. Act.

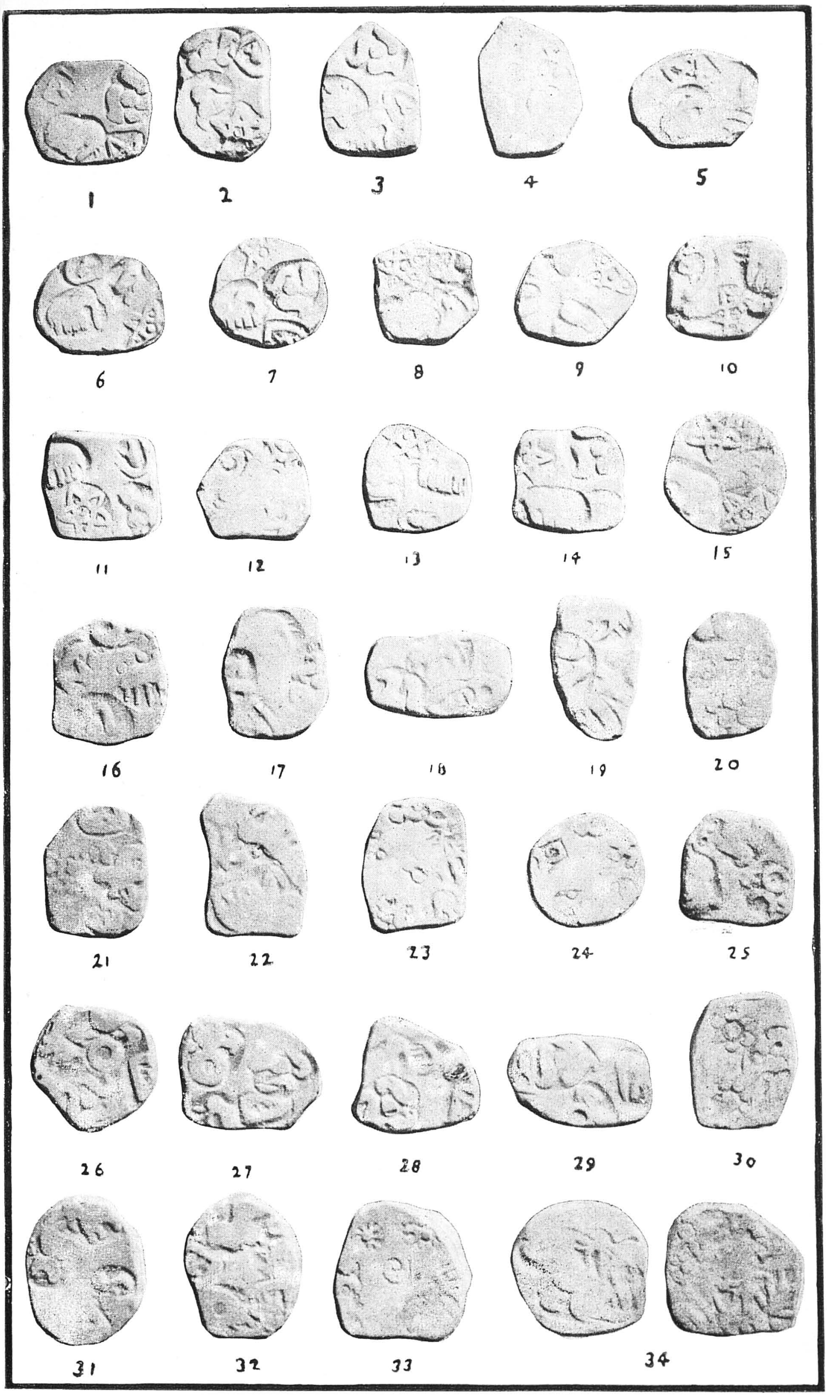
We are also requested to announce that there are certain T.T. coins available for sale at His Majesty's Mint, Bombay. They contain 2 gold coins of Vijayanagar, 2 silver coins of Aurangzeb and about 53 silver coins of later Mughals and Marathas.

Prince of Wales Museum, Bombay.

We have received a statement from the Curator (Archæological Section) Prince of Wales Museum wherein it is stated that during the year 107 gold, 743 silver and 467 copper coins were offered for selection by the Governments of Central Provinces (150 AR), United Provinces (93 AR, 234 Æ), Punjab (134 AR, 152 Æ), Madras (107 AV, 354 AR and 17 Æ) and Bihar (12 AR, 64 Æ) out of which 5 gold, 62 silver and 22 copper coins in all were selected and acquired for the Cabinet of the Museum.

Besides this, about three Treasure Trove hoards discovered in Bombay Presidency were examined and reported to the Government for acquisition. One of these lots from Satara District contained 114 gold coins of the Vijayanagar dynasty, the other two contained coins of the Mughals and those struck in the name of later Mughals by various Maratha States in Western India. The new mints of Aurangnagar, Daman, Junnar and mint epithets of Azamnagar and Karnatak with Bijapur and various mint marks found on these coins are under study.

PRINTED AND PUBLISHED FOR THE NUMISMATIC SOCIETY OF INDIA, BY S. A. BLISS AT THE EXAMINER PRESS, FORT, BOMBAY.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

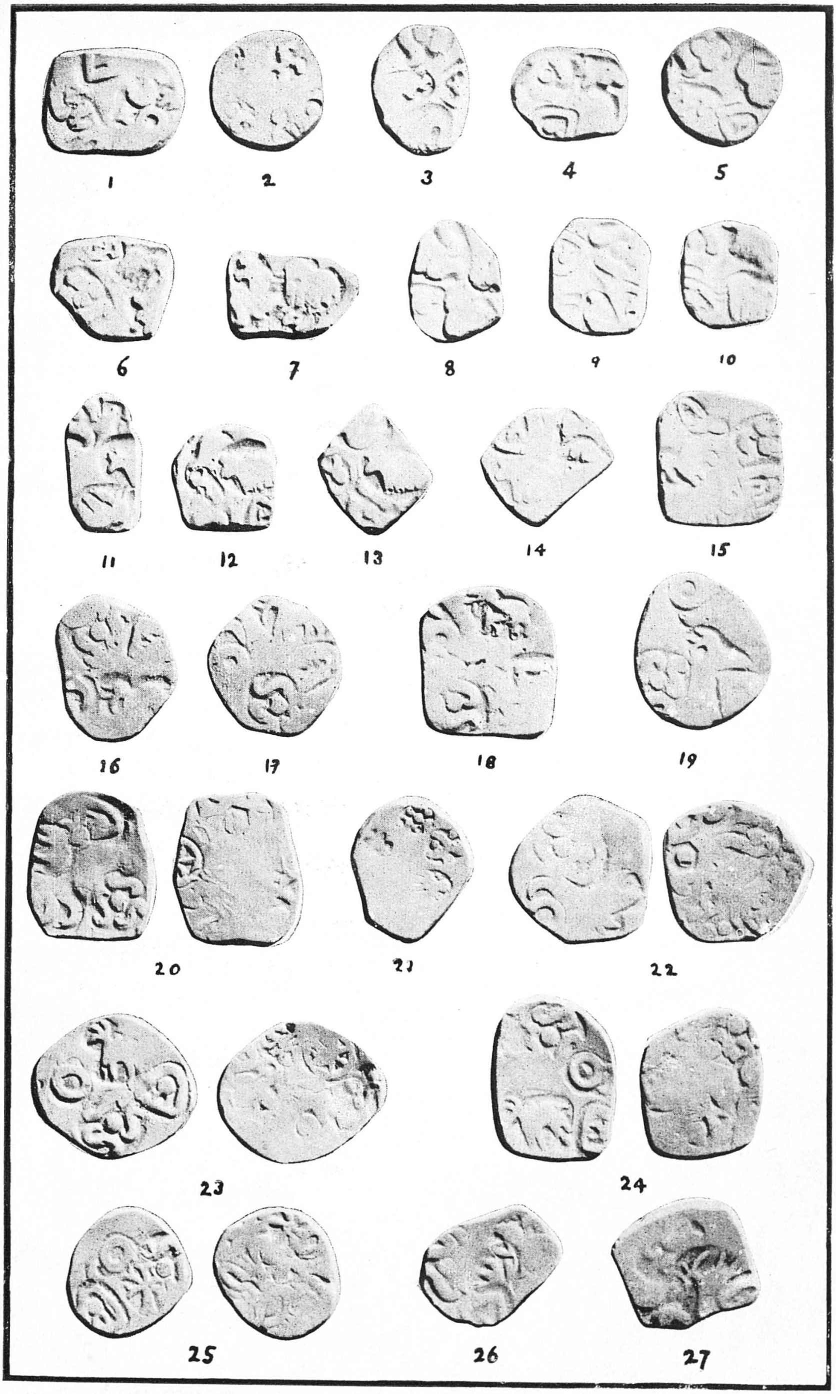
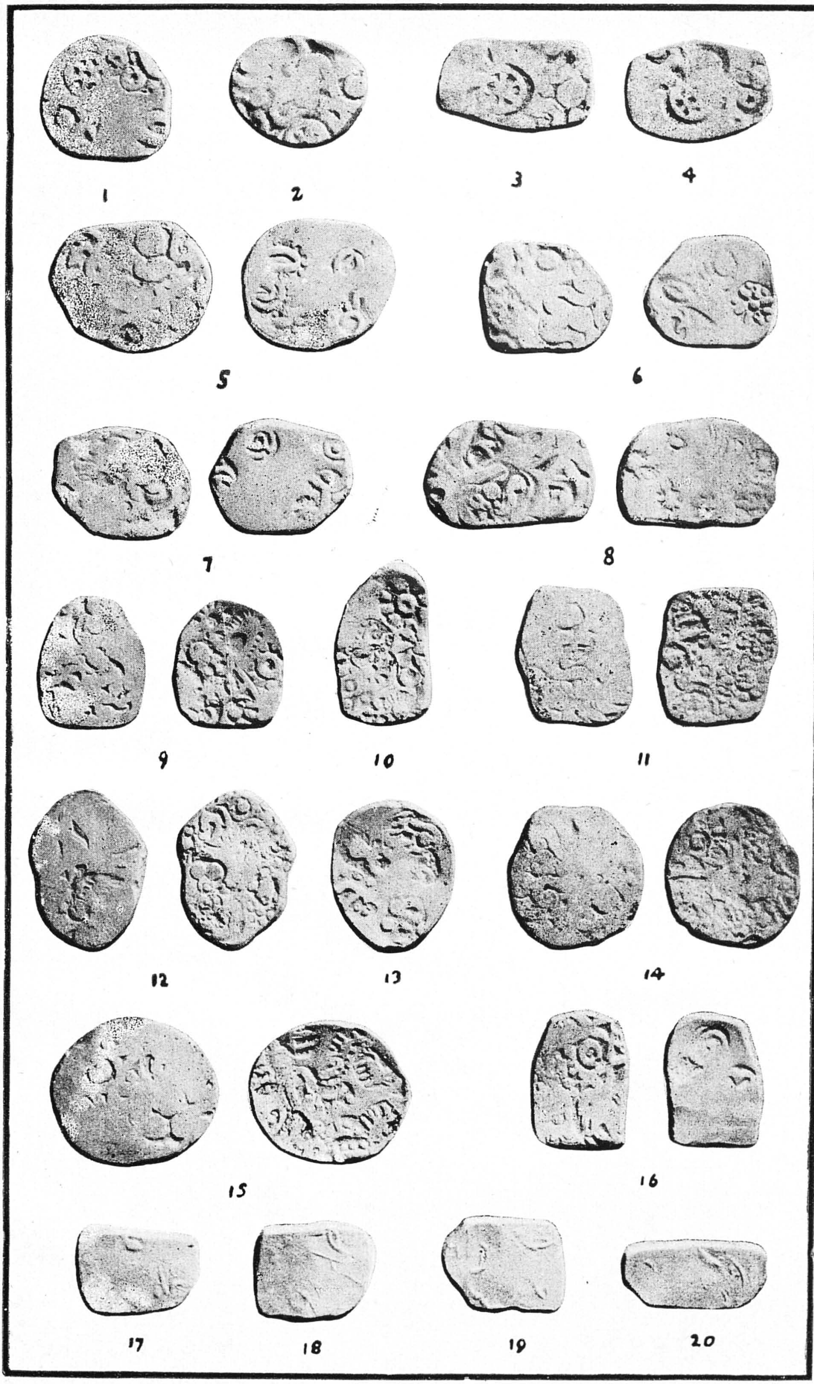

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

Plate VII



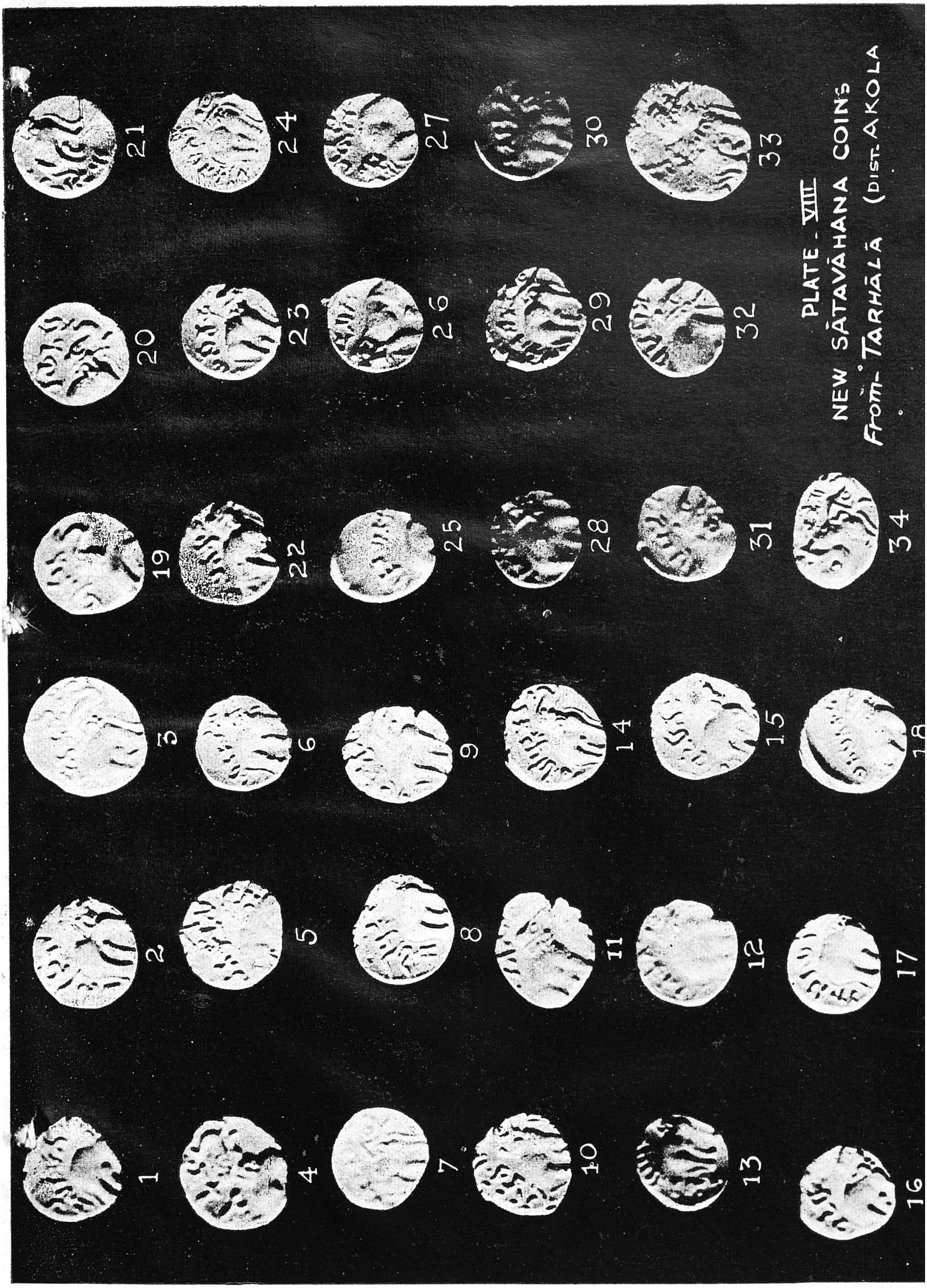
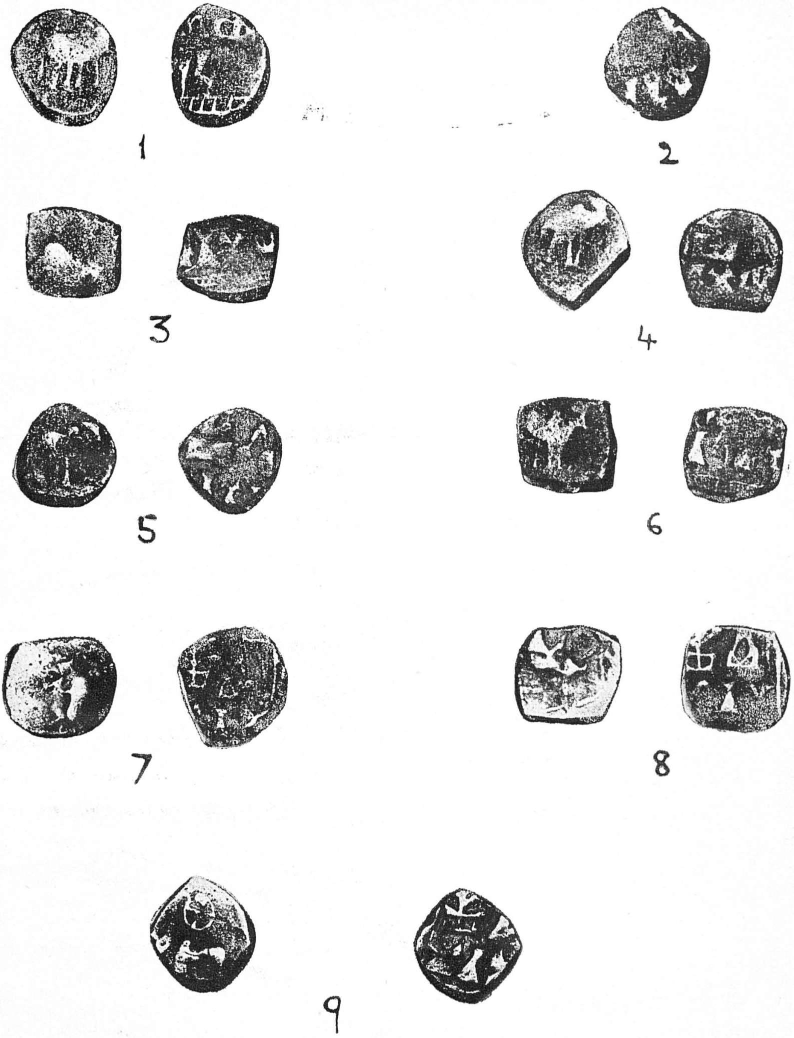


PLATE - VIII
NEW SĀTAVĀHANA COINS
From - TARHĀLĀ (DIST. AKOLA)


1
2
3
4
5
6
7
8
9

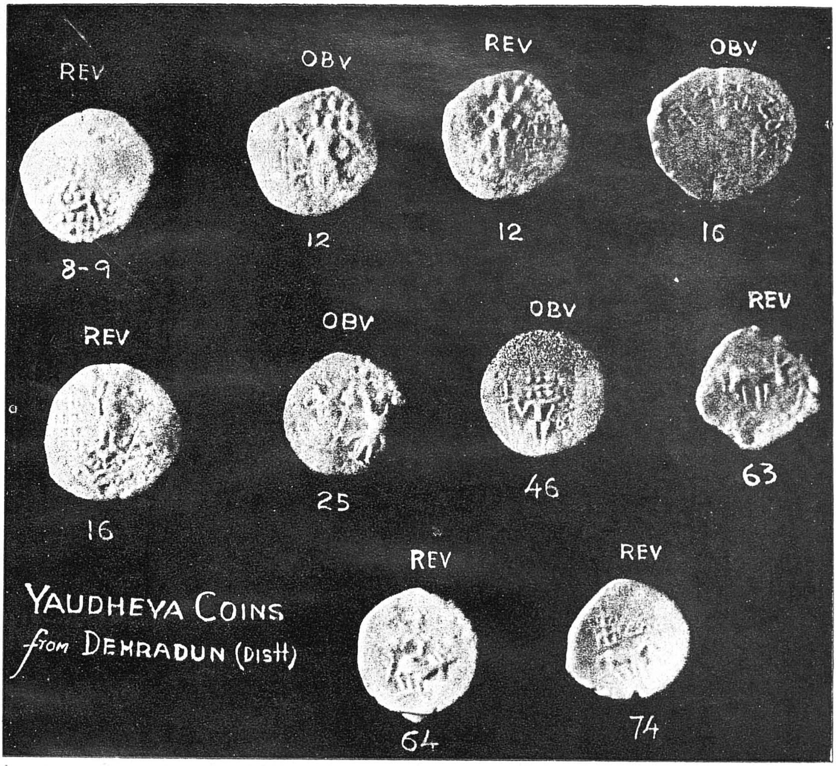
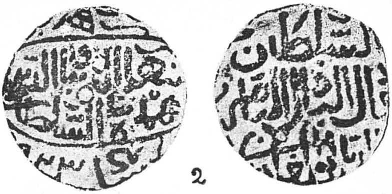

REV
8-9
OBV
12
REV
12
OBV
16
REV
16
OBV
25
OBV
46
REV
63
YAUDHEYA COINS
from DEHRADUN (Distt)
REV
64
REV
74

Plate X-A

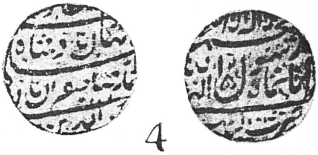
1
2
3
4
5
6
7

1



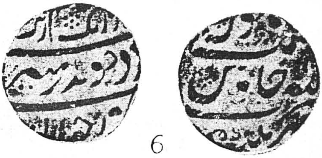
2

3



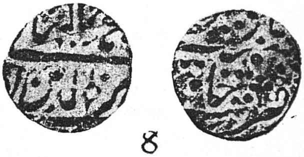
4

5



6

7



8